CITY OF HUNTINGTON BEACH
PLANNING & BUILDING DEPARTMENT
MITIGATED NEGATIVE DECLARATION NO. 13-07

1. **PROJECT TITLE:**	Magnolia Street Bridge Preventive Maintenance Project (over Huntington Beach Channel)
2. **LEAD AGENCY:**	City of Huntington Beach 2000 Main Street Huntington Beach, CA 92648
Contact: **Phone, email:**	Hayden Beckman, Project Planner (714) 374-5317, HBeckman@surfcity-hb.org
3. **PROJECT LOCATION:**	The project is located in the City of Huntington Beach on Magnolia Street, over the Huntington Beach Channel southwest of Banning Avenue. **Figure 1-1** presents a vicinity and regional map of the project study area.
4. **PROJECT PROPONENT:**	City of Huntington Beach 2000 Main Street Huntington Beach, CA 92648
Contact Person: **Phone, email:**	Jonathan Claudio, P.E., Sr. Civil Engineer (714) 374-5380, JClaudio@surfcity-hb.org
5. **GENERAL PLAN DESIGNATION:**	Right of Way
6. **ZONING:**	Right of Way

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7. PROJECT DESCRIPTION

Background

The purpose of the proposed project is to enhance public safety and protect the Huntington Beach Channel by performing maintenance activities on the existing Magnolia Street Bridge that are intended to restore the integrity of its original design. The Magnolia Street Bridge was constructed in 1973. It is a three-span cast-in-place reinforced concrete slab bridge with four traffic lanes. Parts of the bridge have deteriorated due to normal wear from vehicular traffic and from tidal flux of the estuarine ecosystem setting. The bridge concrete barriers are cracked and spalled (unsound broken concrete) with exposed internal reinforcing that has noticeably corroded. The bridge pier walls (bridge support) have unsound concrete. The asphalt-concrete (AC) overlay on the bridge deck is also cracked, resulting in roadway water leaking through the deck into the Huntington Beach Channel. Rock slope protection is missing from the channel embankments near the bridge abutments, resulting in the erosion of the embankment and weakening of the bridge substructure. These aspects of the bridge's deterioration will result in conditions that are potentially unsafe to the public and could compromise water quality in the Huntington Beach Channel. Therefore, repair and rehabilitation of the bridge are proposed to address these existing conditions.

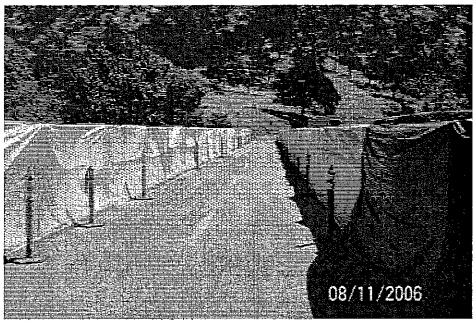
Bridge Repair and Rehabilitation

Repair/rehabilitation would require the following maintenance measures:

- Remove and replace the concrete barrier and chain link railing on both sides of the bridge with corrosion-resistant materials such as stainless steel fence posts and epoxy coated reinforcing steel.
- Remove and replace existing asphalt concrete (AC) overlay to protect the bridge and channel from water leaks and to provide a durable driving surface.
- Remove unsound concrete and patch concrete (or shotcrete) at the bridge pier walls. Unsound concrete and patch concrete work over or near the channel will require working platforms with fully enclosed protective covers.
- To prevent further embankment erosion, missing rock slope protection shall be restored to the original design and limits. Approximately 142 cubic yards of rock slope is missing from the channel embankment area below the abutments. To restore the original rock slope protection in this embankment area, 142 square yards of rock slope protection fabric would be placed over the area and 142 cubic yards of ¼ ton rock, 3-feet thick would be placed over the fabric.
- All existing utilities attached or adjacent to the bridge will be protected in-place.

Details of these actions are as follows:

Working Platform with Protective Cover



A working platform with protective cover will be required to contain the construction activities, including removal of unsound concrete with a jack hammer, sand blasting of corroded reinforcing, concrete patching (or shotcrete), and curing of concrete. This type of containment has been typically used when removing and repainting steel structures near sensitive areas (as shown on the right).

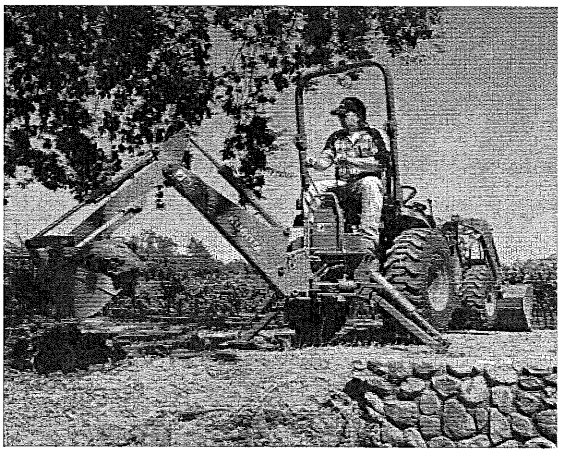
As stated above, the unsound concrete area that will be removed and patched is subject to wet-dry conditions each day. The working platform will need to be installed during low tide and remain in place during high tide. Construction of the working platform shall not include the use of pressure treated lumber. Since the working platform must have sufficient strength and rigidity to support the construction loading, a platform that is installed and removed each shift during the low tide period is not feasible. Conversely, the protective cover will likely be constructed of a tarp material and easily removed each day before the high tide. A likely construction sequence for a working platform with protective cover follows:

1) The working platform will be prefabricated in pieces, floated by small watercraft into place and installed around the concrete bents and piles. It will be installed during low tide conditions. Small watercraft and the platform itself will either be brought by land or launched at the adjacent marina, or the platform could be towed into place with a small watercraft. It is possible that some of the work to bring in and install the platform could be done overhead from the bridge.
2) During low tide, a protective cover will be installed around the work area to contain and prevent materials, equipment, or debris from falling into the channel or onto adjacent land.
3) Once the working platform with protective cover is in place, removal of unsound concrete, blast cleaning of corroded reinforcing, and concrete patching (or shotcrete) can begin.
4) Working platforms and protective covers will be cleaned of debris and fine silt at the end of work each day (before high tide). It is assumed that protective covers will not be designed and constructed for channel flow loads, and should be removed at the end of each work day (before high tide).

Replacement of Rock Slope Protection by Small Construction Equipment

Replacement of rock slope protection (RSP) will likely involve use of small construction equipment; with additional potential for use of a "barge and rail" option.

Because of the low overhead clearance, small construction equipment, including small excavators or tractors, could be utilized to place rocks under the existing bridge. An example of this type of excavator or tractor is shown on the right. It should be assumed that by working with low overhead clearance and with small construction equipment, the rock slope protection work will take longer to complete than would be the case without this constraint. This work will be done at low tide with silt curtains protecting the channel water.

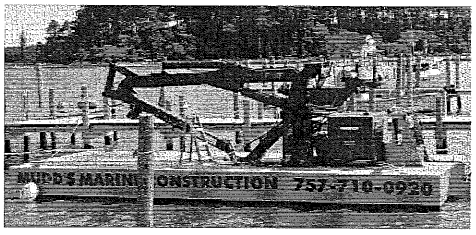


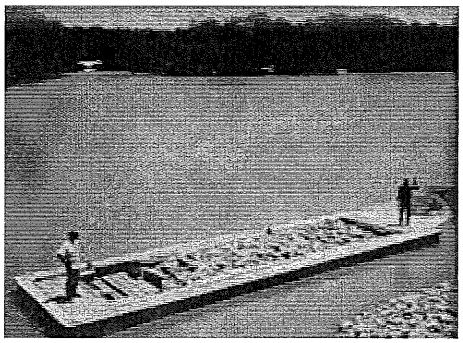
A likely construction sequence for installing rock slope protection with small construction equipment follows:

1) Silt curtains will be installed during low tide around the work area. The silt curtains must have sufficient strength to support channel flow loads. The silt curtains will be used to keep sediment released from soil excavation work from entering the channel or adjacent property.
2) Native soil will be used to fill/ backfill exposed piles.
3) Rock slope filter fabric will be placed against the native soil.
4) Finally, quarter-ton rocks will be placed over the filter fabric, filling the channel slope from the abutment to approximately three- to five-feet down the slope, completing the rock slope protection.

Alternative Method of Rock Slope Protection:
Replacement by Barges and Rail System

This option may be used in addition to (or instead of) the small construction equipment method outlined above if it is found to serve the project best during the final rock slope protection replacement.





Because of the low overhead clearance, small barges could be utilized to deliver and place rocks under the existing bridge. The barges will be brought by land and launched at the RSP northwest of the bridge. A hoist will lift rocks from the barge, slide the rocks along a bridge attached rail and lower the rocks into position. It is anticipated that by working with low overhead clearance and barges/rail, the rock slope protection work will take longer to complete than would be the case without this constraint. This work

should be done at low tide with silt curtains protecting the channel water.

A likely construction sequence for installing rock slope protection with barges and rail system follows:

1) Silt curtains will be installed during low tide around the work area. The silt curtains must have sufficient strength to support channel flow loads. They will be used to keep sediment released from soil excavation work from entering the channel or adjacent property.
2) Native soil will be used to fill/ backfill exposed piles.
3) Rock slope filter fabric will be placed against the native soil.
4) Finally, using the barges, rail and hoist, one-quarter-ton rocks will be placed over the filter fabric, filling the channel slope from the abutment to approximately three- to five-feet down the slope, completing the rock slope protection.

Construction Equipment

Construction methods and equipment for the maintenance activities will include the following:

- Concrete barrier and chain link railing removal shall be done from the top of the existing bridge utilizing jack hammers, bobcat loaders, tractor loaders and dump trucks. Placing concrete barrier and chain link railing shall be done from the top of existing bridge utilizing timber forms, concrete boom pumps and concrete trucks. Measures for preventing material, equipment and debris from falling into the channel are required at all times.
- AC overlay removal shall be done from the top of the existing bridge utilizing asphalt grinders, bobcat and tractor loaders, and dump trucks. Placing AC overlay shall be done from the top of the existing bridge utilizing wheeled asphalt pavers and asphalt trucks. Measures for preventing material, equipment, and debris from falling into the channel are required at all times.
- Unsound concrete removal shall be done from the underside of the bridge on working platforms with protective covers made of a tarp-type material, which will be placed around the area being worked on during low tide and which will be removed before high tide. The working platforms will be constructed of timber, installed during low tide and suspended from the existing bridge soffit and/or piles. The protective covers will contain 100% of any debris produced during the operations. All operations will be required to be performed from within the protective covers during low tide. Small hand-held jack hammers shall remove the unsound concrete as required. All exposed and corroded reinforcing shall be replaced (if needed) and sand blasted clean. Patching shall be done with hand mixed concrete or by shotcrete with high pressure concrete hoses.
- The project will not add additional material to the channel, but will restore the embankment erosion and missing rock slope protection to its original design and limits, as shown on the bridge as-built drawings. Small tractor loaders, barges and dump trucks shall repair and replace the missing rock slope protection in a manner

that minimizes impacts to environmentally sensitive areas adjacent to the existing bridge. Silt fences will be required around the area being worked on to prevent water turbidity from escaping the immediate area around the work. Strict construction access limits will be specified and enforced with fences to minimize disturbance of environmentally sensitive areas.

Construction Staging Area

All construction work is assumed to be done within the City of Huntington Beach (City) or Orange County Flood Control District (OCFCD) property. While working in OCFCD property, construction permits will be required from the City and Contractor. Temporary construction easements (TCEs) will not be required by OCFCD. At the end of each work day; all contractor equipment, construction materials (rocks, debris, etc.), and other possessions will be taken off site.

Traffic Handling and Construction Schedule (6 Construction Months)

Since Magnolia Street is primary Arterial Street and a direct link to the beach area, traffic handling and control will be scheduled and phased to minimizing traffic disturbance. Construction work will be scheduled during winter and early spring months when beach traffic is at its least. Traffic will be staged around the construction site, with 4 phases of traffic handling and control:

- During phase 1, vehicular and pedestrian traffic will be moved to the south allowing for construction on the north side of the bridge (remove and replace the concrete barrier and chain link railing) and work below the bridge (remove unsound concrete and patch unsound concrete, and replace missing rock slope protection). Vehicular capacity will be lowered from 4 lanes to 3 lanes and pedestrian traffic will remain on the south sidewalk during this phase. Temporary K Railing will provide separation of traffic and construction activities. (2.5 Construction Months)
- During phase 2, vehicular and pedestrian traffic will be moved to the north allowing for construction on the south side of the bridge (remove and replace the concrete barrier and chain link railing). Vehicular capacity will continue to be lowered to 3 lanes and pedestrian traffic will remain on the north sidewalk during this phase. Temporary K Railing will provide separation of traffic and construction activities. (2.5 Construction Months)
- During phase 3, vehicular and pedestrian traffic will remain on the north allowing for construction on the south side of the bridge (remove and replace existing asphalt concrete (AC) overlay). Vehicular capacity will be lowered to 2 lanes and pedestrian walkway will utilize the sidewalk on the south side. Temporary K Railing will provide separation of traffic and construction activities. (0.5 Construction Months)
- During phase 4, vehicular and pedestrian traffic will be moved again to the south allowing for construction on the north side of the bridge (remove and replace existing asphalt concrete (AC) overlay). Vehicular capacity will be

lowered to 2 lanes and pedestrian walkway will utilize the sidewalk on the south side. Temporary K Railing will provide separation of traffic and construction activities. (0.5 Construction Months)

PROJECT DESIGN FEATURES:

Project design features (PDFs) aim to avoid and minimize potential to adversely affect biological resources within a 500-foot buffer zone of the project (Biological Study Area [BSA]).

The proposed PDFs to be incorporated into the project design are:

PDF-1: *General Impact Minimization*

This project design feature will minimize impacts to special-status species, surrounding habitat, and waterways.

- The construction contractor will set construction boundaries to exclude environmentally sensitive habitat areas (ESHAs) from the construction footprint, as appropriate.
- Project impact areas will be limited to previously disturbed areas, thus minimizing threats to sensitive areas, when possible.
- Project work areas will be limited to the Orange County Flood Control District (OCFCD) right-of-way; no access to Huntington Beach Wetlands Conservancy (HBWC) land will be permitted, thus minimizing threats to sensitive areas.
- All personnel, equipment, and vehicles will remain within the set construction boundaries at all times to prevent impacts to regulatory listed species and special-status vegetation communities.
- Invasive species within the temporary disturbance areas will be controlled to the maximum extent feasible using hand pulling or hand tool removal methods only, per the request of OCFCD. Limiting control methods to hand pulling or hand tools will further protect the surrounding habitat and special-status plant species.
- The entire work area will be clearly delineated with flagging and fencing.
- The project footprint will be set at the minimum size to accomplish necessary work, resulting in minimal impacts to the waterway.
- All trash will be cleaned up and disposed of properly following each work day.
- Equipment will be checked each day to ensure that fluid and/or other contaminants are not leaking.

- Silt fencing will be installed in upland areas to reduce potential for pollutants to enter the channel, including topsoil and construction debris. The silt fencing will be cleared of this debris, as needed, following storm events.

- Activities within intertidal areas will only occur during low tide to limit introduction of pollutants into the water and to minimize impacts to aquatic life.

PDF-2: *Conduct pre-construction surveys for special-status wildlife species*

The City will retain a qualified project biologist (biological monitor) to conduct a pre-construction survey for special-status wildlife species within 30 days prior to construction and immediately prior to the first groundbreaking activities.

If special-status species are identified within 500 feet of the Biological Study Area (BSA), proper buffer zones will be delineated and/or monitoring for these species will occur. A permitted biologist will be retained for species requiring a 10(A)(1)(a) permit for survey.

If special-status wildlife species are discovered during pre-construction surveys then the biological monitor will provide a description of each and explain the conservation measures relevant to their protection as part of the Workers' Environmental Awareness Program (WEAP) (See BR-1). During each visit, the monitor will ensure that mitigation measures are being implemented and impacts to these species will not be greater than anticipated.

PDF-3: *Conduct pre-construction survey for estuary seablite, coast woolly heads, and other special-status plant species; flag for avoidance*

Currently, the project area contains barren, compacted soils and is devoid of vegetation. Due to an unknown project start date, this PDF addresses the potential for future colonization by special-status plant species. The biological monitor will also conduct pre-construction surveys for special-status plant species that have the potential to occur within the BSA on OCFCD property, such as estuary seablite (*Suaeda esteroa*) and coast woolly heads (*Nemacaulis denudata var. denudata*). If any special-status plants are detected during pre-construction surveys, then the lead agency will inform the Carlsbad Fish and Wildlife Service Office and the San Diego California Department of Fish and Wildlife (CDFW) office to determine what conservation measures will need to be implemented.

Additionally, the City will retain a qualified biologist to delineate and flag the boundaries of the nearby HBWC property, which does contain special-status plants. This area will be flagged as an ESHA. The biological monitor will record and report observations during construction.

If special-status plants are observed in the project impact area, these areas will also be flagged for avoidance as an ESHA immediately prior to construction. If this area cannot be avoided then the appropriate conservation measures will be applied, as approved by the agencies.

PDF-4: *Conduct pre-construction clearance survey for nesting birds*

Construction activities that may affect nesting birds directly or indirectly (noise/ground disturbance) should be scheduled outside of the nesting bird season (February 15 to September 15), to the greatest extent feasible, to avoid impacts to birds protected under the MBTA.

If construction during the nesting season cannot be avoided, then a pre-construction clearance survey for nesting birds should be conducted by a qualified biologist/biological monitor, within seven days of beginning construction activities to determine the presence or absence of active nests in the BSA. Detailed attention should be paid to bird behavior, including courtship behavior, nest-building activities and anti-predator distraction displays when looking for nests. Pre-construction surveys will be conducted through the use of binoculars only for private properties, including the HBWC lands adjacent to the project site.

If no nesting birds are found within the BSA during the pre-construction survey, construction activities may proceed as scheduled with a qualified biological monitor present, up to eight hours weekly or as directed by the resource agencies. Note: There are large variations in nesting behavior among species and bird nests are often built and eggs are often laid within a few days. Incubation and fledgling periods can last up to 45 days or more. Due to the presence of suitable nesting habitat within the BSA and the migratory nature of many bird species in Orange County surveys for nesting birds will continue throughout the nesting season, during construction, to address new arrivals.

Deterrence Program. If nesting behaviors are detected during the pre-construction clearance surveys, a nesting bird deterrence and removal program may be implemented within the project footprint area for non-special-status birds, as approved by the resource agencies. Such deterrence methods may include removal of previous years' nesting materials and removal of partially completed nests in progress where possible.

If nest deterrence is not possible, the identified nests with eggs or hatched young will be monitored until the young have fledged, are no longer present within the project area or are "out of harm's way."

Active Nest. If an active nest is found within the BSA during construction, a "No Work/No Construction" buffer zone will be flagged by the biological monitor around the active nest (usually a minimum radius of 200 feet for passerine birds and 500 feet for raptors) to minimize project impacts to the nesting activity.

If nesting occurs within the buffer during construction, a request to adjust the buffer zone will be negotiated with the agencies on a case-by-case basis. This request will identify the nesting species, nest locations, observed behaviors, known tolerances, and an analysis of potential for nest failure, as determined by the qualified biological monitor. Project activities may resume within the no work/no construction buffer zone when the biological monitor has determined that the nest(s) has (have) failed or is (are) no longer active. The biological monitor will be present up to eight hours weekly or as deemed appropriate by the resource agencies.

If listed Endangered or Threatened species are found within 500 feet of the project work area, the U.S. Fish and Wildlife Service (USFWS) and CDFW, as appropriate, will be consulted within 24 hours of first nesting observation.

PDF-5: *Installation of turbidity curtains (silt curtains)*

- Construction activities will be preceded by the installation of turbidity control measures using silt curtains. The silt curtains will remain in place for the duration of the project and will be secured to maintain their integrity against tidal flux and storm runoff.

- Fish exclusion measures will be implemented concurrently with the installation of the silt curtains. Typical fish exclusion includes systematic seining for aquatic life, especially fish, within the work area. A qualified biologist will use a seine net, dip net or cast net to remove and relocate aquatic wildlife to areas outside of the impact area, within the channel, out of harm's way.

- The curtains will be maintained through daily above-water and as-needed underwater inspections to ensure their integrity. A qualified biologist or a construction contracting crew experienced with silt fencing must make above-water and underwater inspections immediately following all storm events to identify damage to the silt curtains.

- Damage to the silt curtains will be repaired within 24 hours of discovery. If damage to the silt curtains is detected, a fish exclusion process should occur concurrently with each repair, to avoid impacts to fish or aquatic wildlife that may have entered the active construction zone. A qualified biologist will do the fish exclusion. A construction contractor or qualified biologist will repair the silt fence .

- To control and contain incidental water pollutant releases, oil/gas/sediment booms will be installed atop the silt curtains.

PDF-6: *Caulerpa taxifolia Survey*

To satisfy the Essential Fish Habitat Assessment mandated by Section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act, the request of Bryant Chesney of the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service, and the anticipated Coastal Development Permit through the California Coastal Commission, the City will conduct one underwater *Surveillance Level Survey* as defined within the Caulerpa Control Protocol (Version 4, February 25, 2008), whereby 20% of the project area with the 10-meter buffer will be surveyed by a certified *Caulerpa* surveyor for the presence or absence of *Caulerpa taxifolia*. The survey will be conducted within 30 to 90 days of project initiation during the high growth season (March 1 – October 31). If project start is outside of the growing season a request will be made to the conduct the survey during that time. If Caulerpa is found, NOAA Fisheries and CDFW will be notified within 24 hours of the discovery and a report will be submitted within 15 days following the discovery.

PDF-7: *Eelgrass Survey*

A. Pre-Construction Eelgrass Survey

A valid pre-construction eelgrass (*Zostera marina*) survey will be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey will

be completed prior to the beginning of construction and will be valid until the next period of active growth. The survey will be prepared in compliance with the "Southern California Eelgrass Mitigation Policy" (SCEMP, 1991) Revision 11 adopted by the National Marine Fisheries Service and will be prepared in consultation with the CCC, CDFW and USACE.

B. Post Construction Eelgrass Survey

If eelgrass is identified in the project area by the survey required in subsection A of PDF-7 above, within one month after the conclusion of construction, the City will survey the project site to determine if any eelgrass was adversely impacted. The survey will be prepared in compliance with the "Southern California Eelgrass Mitigation Policy" (SCEMP, 1991) Revision 11 adopted by the National Marine Fisheries Service and will be prepared in consultation with the CCC, CDFW, and USACE. The client will submit the post-construction eelgrass survey for the review and approval by the aforementioned agencies within 30 days after completion of the survey. If the post construction survey identifies eelgrass that has been impacted by the project during construction, consultation with the aforementioned agencies should take place and necessary compensatory mitigation requirements determined.

8. SURROUNDING LAND USES AND SETTING:

The City of Huntington Beach is located in Orange County in southern California, approximately 35 miles south of Los Angeles and 90 miles north of San Diego. The city encompasses an area of 27.7 square miles. It is bounded by the Pacific Ocean to the west, the Cities of Westminster and Fountain Valley to the east, the City of Seal Beach to the north, and the City of Costa Mesa to the south.

The project is located adjacent to the Huntington Beach Wetlands. The Huntington Beach Wetlands is primarily a tidally influenced saltwater marsh that receives seawater via the Talbert Channel and freshwater runoff via the Huntington Beach municipal stormwater system. Huntington Beach Wetlands contains vulnerable natural communities, including coastal salt marsh, which are high-value habitats to native wildlife. These wetlands are managed by the Huntington Beach Wetlands Conservancy (HBWC), a California non-profit corporation run by a community-based group of private citizens aiming to save and protect wetlands (Figure 1-2). Work will be contained within the Orange County Flood Control District right-of-way.

The surrounding land uses for the project area are as follows:

Direction	Land Use
North	Non-Operational Oil Storage Facility
South	Coastal Conservation – Huntington Beach Wetlands (Brookhurst Marsh)
East	Low Density Residential – Banning/Magnolia Park
West	Coastal Conservation – Huntington Beach Wetlands (Magnolia Marsh)

Figure 1-1: Magnolia Street Bridge - Regional and Local Vicinity Location Map

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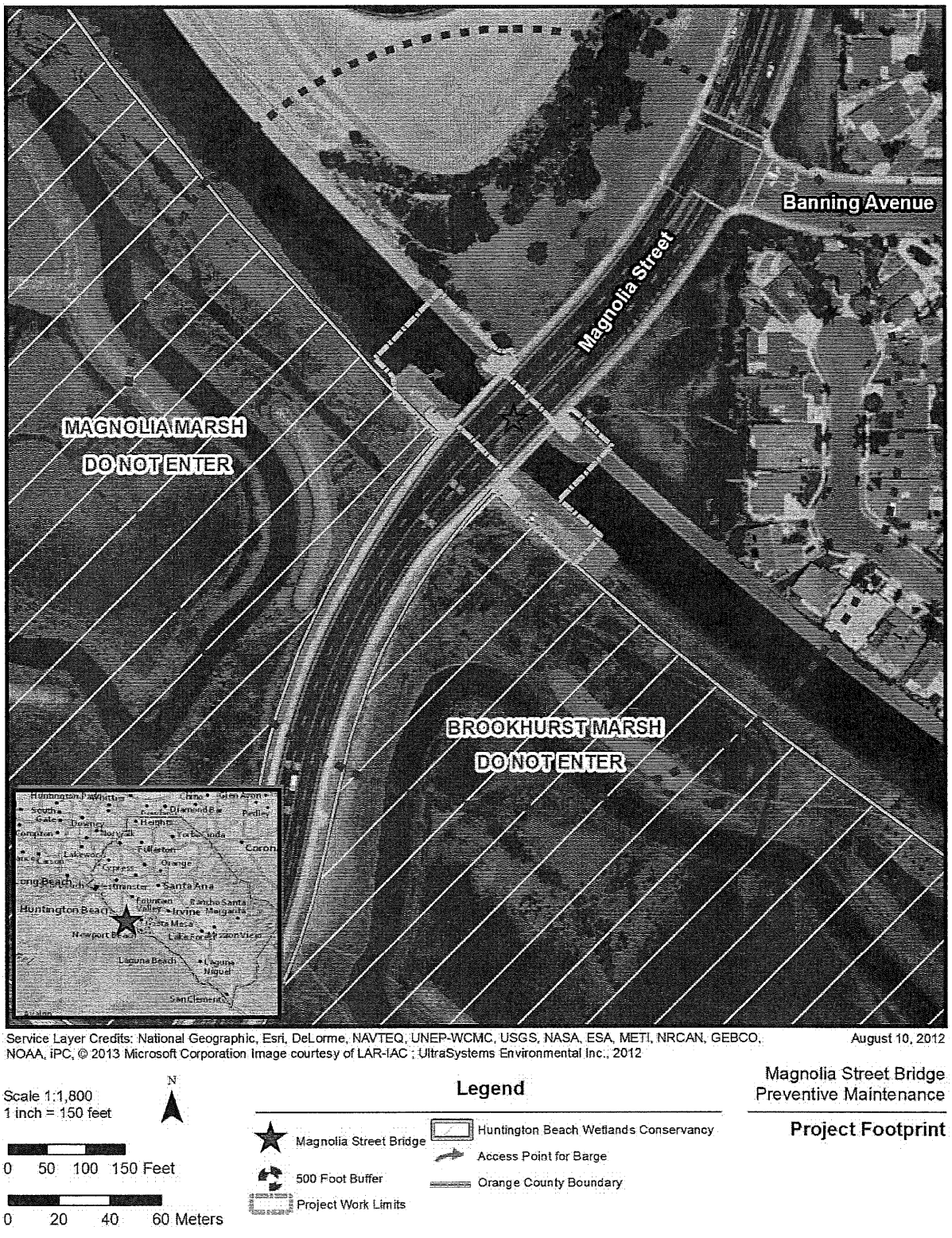

Figure 1-2: Areas Owned by Huntington Beach Wetlands Conservancy

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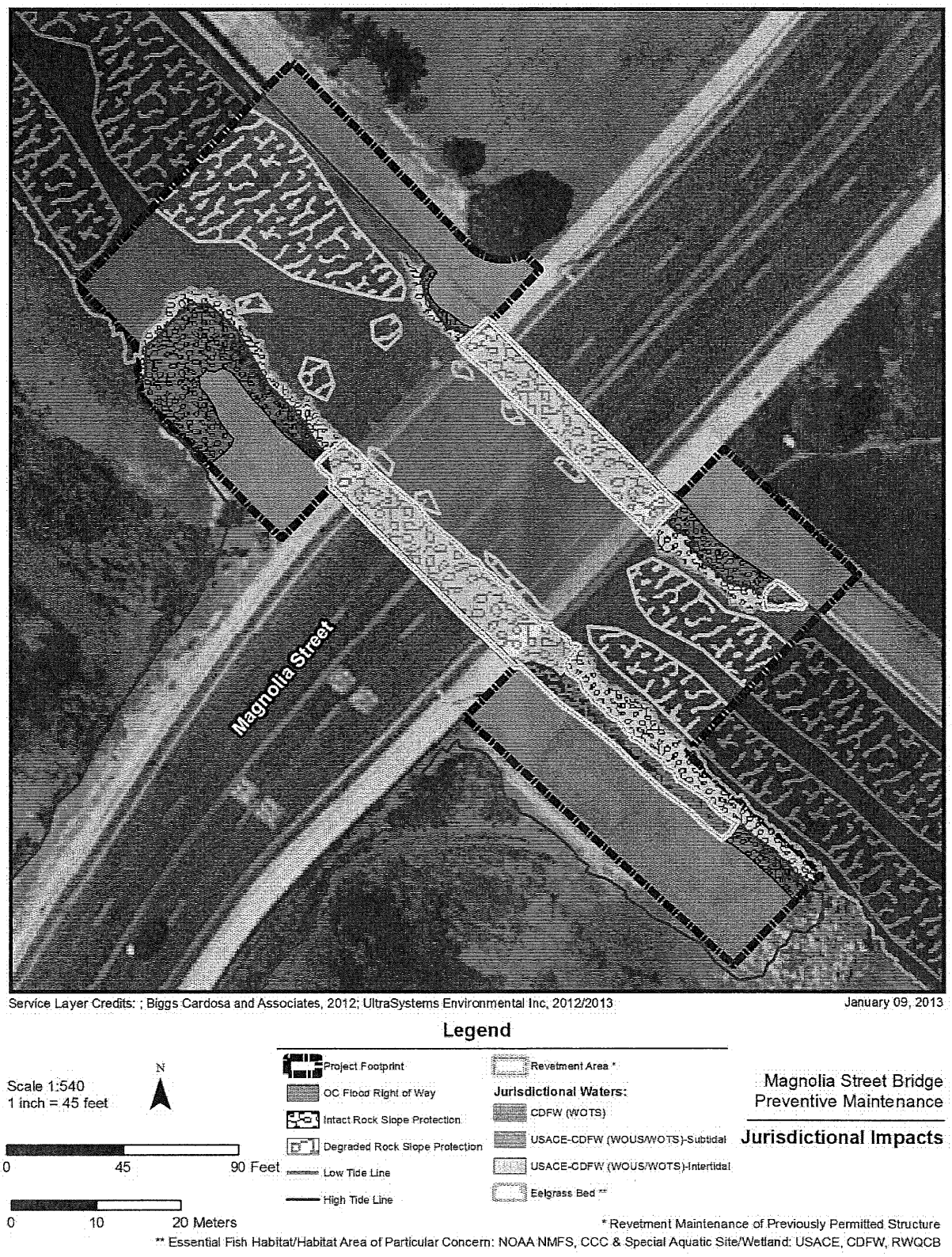

Figure 1-3: Magnolia Bridge Project Jurisdictional Impacts

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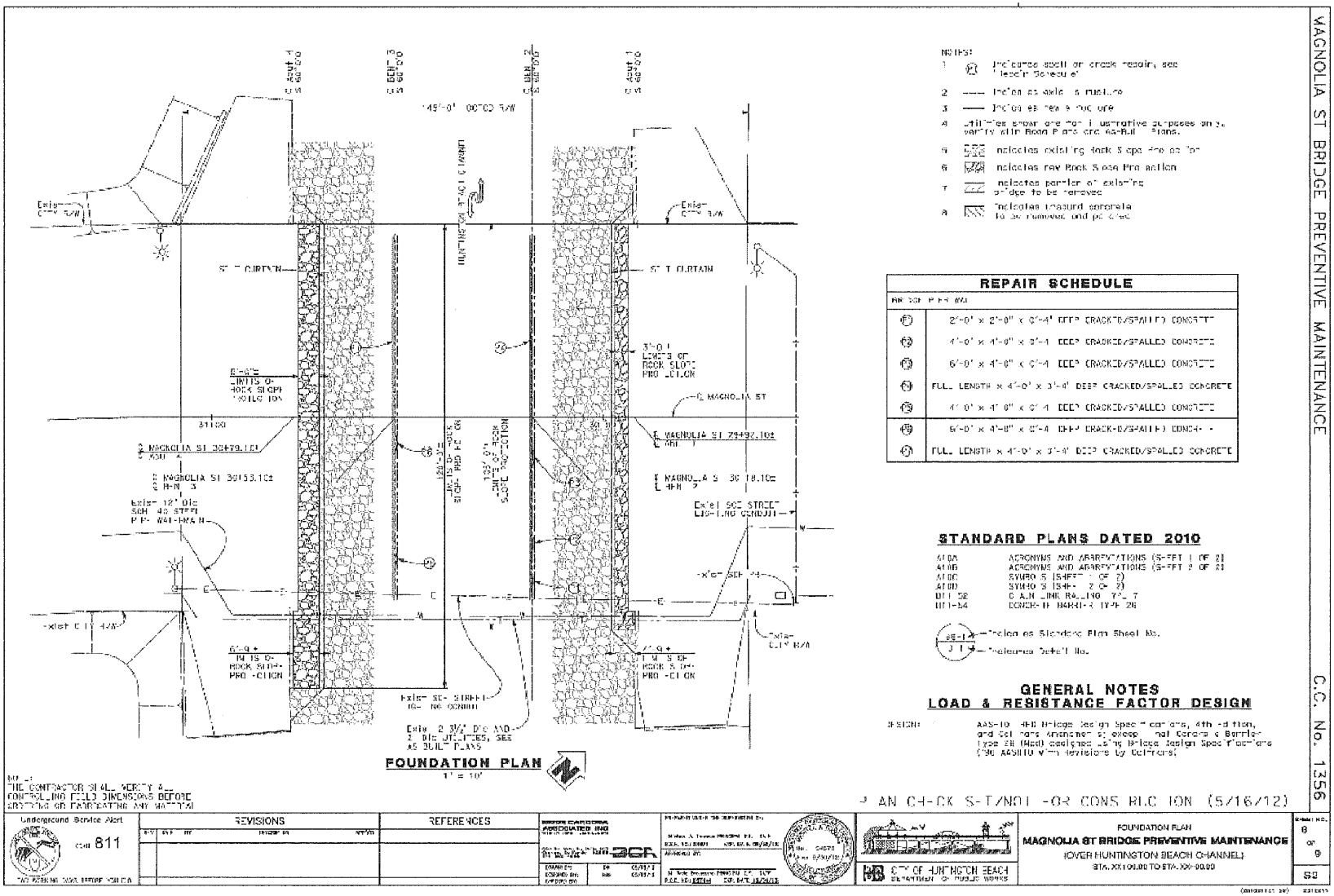

Figure 1-4: Engineering Drawing
Source: Biggs Cardosa Associates 2011

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9. OTHER PREVIOUS RELATED ENVIRONMENTAL DOCUMENTATION:

- Mitigated Negative Declaration No. 2006-04 / Coastal Development Permit No. 2006-05 – Magnolia Street Sidewalk Installation, approved February 20, 2008.

- Preliminary Environmental Study (PES) for the Magnolia Street Bridge Preventive Maintenance Project, approved October 26, 2012.

- National Environmental Quality Act (NEPA) Categorical Exclusion, in progress.

- Natural Environment Study (NES) for the Magnolia Street Bridge Preventive Maintenance Project, in progress.

10. OTHER AGENCIES WHOSE APPROVAL IS REQUIRED (AND PERMITS NEEDED) (i.e. permits, financing approval, or participating agreement):

The project is subject to several local, state and federal regulations designed to protect and promote environmental quality. No project-related construction activity may be conducted until the following permits have been issued by the appropriate agencies:

- U.S. Army Corps of Engineers: Clean Water Act Section 404 Nationwide Permit, Rivers and Harbors Act Section 10 Permit (USACE 404 Permit).

- Santa Ana Regional Water Quality Control Board: Clean Water Act Section 401 Water Quality Certification, National Pollutant Discharge Elimination System (NPDES) Permit (RWQCB 401 Certification).

- California Department of Fish and Wildlife (CDFW): Concurrence Request Letter or Incidental Take Permit under Section 2081 of the California Endangered Species Act (CESA) (2081 Permit).

- California Coastal Commission: Coastal Development Permit (CDP) under Section 30600 of the California Public Resources Code (CDP Permit).

- NOAA National Marine Fisheries Service Groundfish Essential Fish Habitat and Habitat Area of Particular Concern consultation under Sustainable Fisheries Act of 1996 (Public Law 104-267) (NOAA EFH Assessment).

- U.S. Fish and Wildlife Service: Federal Endangered Species Act Section 7 Consultation. Informal Consultation between Caltrans and the USFWS will involve a request for an official species list (from USFWS) and a critical habitat query. Findings will be incorporated into a request to USFWS for concurrence that project activities are Not Likely to Adversely Affect federally-protected special status species. If a formal consultation is necessary, Caltrans, the lead federal agency, will notify the City.

- U.S. Coast Guard (USCG) Section 9 of the Rivers and Harbors Act: Project Start "notification letter" to Cmdr. Sulouff for work occurring on the bridge within navigable waters. (Notification letter to include project description, dates of project initiation, and conclusion. Finalized project permits and approvals will likely be needed at time of signature).

- CDFW Section 1600 et al Permit (Lake and Streambed Alteration Agreement: Consultation with Marilyn Fluharty of CDFW determined that a 1602 permit is necessary for this project.

In addition, the project will require compliance with the provisions of CEQA, NEPA, and MBTA. This project will comply with local city and county ordinances, as applicable.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or is "Potentially Significant Unless Mitigated," as indicated by the checklist on the following pages.

☐ Land Use / Planning	☒ Biological Resources	☐ Aesthetics
☐ Population / Housing	☐ Mineral Resources	☒ Cultural Resources
☐ Geology / Soils	☐ Hazards and Hazardous Materials	☐ Recreation
☐ Hydrology / Water Quality	☐ Noise	☐ Agricultural Resources
☐ Air Quality	☐ Public Services	☐ Greenhouse Gas Emissions
☐ Transportation / Traffic	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance

DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared. ☐

I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION** will be prepared. ☒

I find that the project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

I find that the project **MAY** have a "potentially significant impact" or a "potentially significant unless mitigated impact" on the environment, but at least one impact (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, **nothing further is required**. ☐

Signature — Date: 10/24/13

HAYDEN BECKMAN. — PLANNING AIDE

Printed Name — Title

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards.

2. All answers must take account of the whole action involved. Answers should address off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. "Potentially Significant Impact" is appropriate, if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more "Potentially Significant Impact" entries when the determination is made, preparation of an Environmental Impact Report is warranted.

4. Potentially Significant Impact Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (Section 15063(c)(3)(D)) Earlier analyses are discussed in Section XIX at the end of the checklist.

6. References to information sources for potential impacts (e.g., general plans, zoning ordinances) have been incorporated into the checklist. A source list has been provided in Section XIX. Other sources used or individuals contacted have been cited in the respective discussions.

    a) The following checklist has been formatted after Appendix G of Chapter 3, Title 14, California Code of Regulations, but has been augmented to reflect the City of Huntington Beach's requirements.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

I. LAND USE AND PLANNING. *Will the project:*

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Source: 1, 2, 3) ☐ ☐ ☐ ☒

Discussion: The project site is an existing bridge, as indicated in the City's general plan and zoning maps. Implementation of the project will not require a change to the existing land use and zoning designations, will not alter the size or intensity of the existing land use, and is consistent with the City's general plan and zoning ordinance. Land Use Goal 5 of the General Plan states that one of the City's goals is to "ensure that significant environmental habitats and resources are maintained." Likewise, the project is also consistent with, and will not conflict with the City's Local Coastal Program. As stated in the Local Coastal Program, the City intends to assess existing access points for maintenance needs, and repair and/or maintain as needed (Implementation Program I-C 9). The Local Coastal Program also specifies that the City implement infrastructure improvements to fund the design, construction, and maintenance of the Coastal Zone's Infrastructure System (Implementation Program I-C 10). In addition, the project is consistent with Policy C 7.1.3 of the Coastal Element which states that development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. Therefore, the project will not conflict with any applicable land use plan, local coastal program, policy, or regulation of the City of Huntington Beach, and no impacts would occur.

b) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Source: 1, 4) ☐ ☐ ☐ ☒

Discussion: The project will not conflict with any applicable and adopted habitat conservation plans (HCPs) or natural community conservation plans (NCCPs). The sole approved and implemented NCCP within Orange County is the Central/Coastal Orange County Natural Community Conservation Plan. However, the project site is not located within the plan area, and therefore is not subject to the provisions of this NCCP. Although the project site is located within another NCCP/HCP, the Orange County Transportation Authority Natural Community Conservation Plan/Habitat Conservation Plan, that plan is currently in preparation and has not been approved or implemented.

c) Physically divide an established community? (Source: 1) ☐ ☐ ☐ ☒

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: The project will conduct preventive maintenance on an existing bridge in the City of Huntington Beach. It is an infrastructure improvement project. The City does not propose to construct any additional physical structure that may potentially physically divide a community. The purpose of the project is to enhance public safety, repair and rehabilitate a deteriorating bridge structure, and restore missing rock slope protection to its original design and limits. The project will not physically divide an established community, and consequently, no impact relating to the physical division of an established community will result from project implementation.

II. POPULATION AND HOUSING. *Will the project:*

a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)? (Source: 5) ☐ ☐ ☐ ☒

Discussion: The project will perform preventive maintenance on an existing bridge, and restore it to its original design. The project does not propose new homes or businesses that would induce residential population growth. Furthermore, the bridge capacity remains unchanged with no extension or design expansion. Consequently, it will neither directly nor indirectly induce substantial population growth in the area. No impact to population growth will occur due to implementation of the project.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

Discussion: The project will perform preventive maintenance on an existing bridge, and will not displace existing housing. It will not necessitate the construction of replacement housing elsewhere. No existing housing will be displaced due to implementation of the project.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? ☐ ☐ ☐ ☒

Discussion: The project will perform preventive maintenance on an existing bridge, and will not displace substantial numbers of people. It will not necessitate the construction of replacement housing. The project only consists of maintenance activities relating to bridge repair and rehabilitation. Its purpose is to restore the integrity of the original bridge design, enhance public safety, and protect the Huntington Beach Channel. No people will be displaced due to implementation of the project.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

III. GEOLOGY AND SOILS. *Will the project:*

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Source: 6,7) ☐ ☐ ☐ ☒

Discussion: The only known fault near the project is the Seal Beach Fault, located northeast of the project site. According to the Alquist-Priolo Earthquake Fault Zone Maps published by the State of California Department of Conservation, the project is not within an Alquist-Priolo fault zone. Therefore, no impact from an Alquist-Priolo earthquake fault will occur.

ii) Strong seismic ground shaking? (Source: 1, 6, 7) ☐ ☐ ☒ ☐

Discussion: According to the City of Huntington Beach General Plan, all of southern California geology and seismicity is affected by plate tectonics and the forces which cause these plates to move within the earth's crust. The project is for preventive maintenance, and is intended to maintain an existing bridge in a structurally safe and serviceable condition, correct minor structural defects, and extend the service life of the existing bridge. Repair and reconstruction will be consistent with standard engineering practices, and will adhere to applicable standards. Therefore, project impacts will be less than significant in regard to the bridge's ability to withstand seismic ground shaking.

iii) Seismic-related ground failure, including liquefaction? (Source: 1, 6, 7, 9) ☐ ☐ ☐ ☒

Discussion: According to the State of California Seismic Hazards Zonation Program, the project is located within an area of high to very high potential for liquefaction (as noted in the City's General Plan); however, the project is for preventive maintenance and will thus not detrimentally affect the ability of the bridge to sustain impacts from liquefaction, should they occur. No problems related to seismic-related ground failure, including liquefaction, have been noted.

iv) Landslides? (Source: 1) ☐ ☐ ☐ ☒

Discussion: According to the City of Huntington Beach's General Plan, potential landslide areas within the City are limited to those areas near the mesa bluffs, although no historical problems associated with landslides have occurred in the area. The Magnolia Street Bridge is located in a relatively flat area with no slopes adjacent to the site. The General Plan indicates that the project is not located in a potentially unstable slope area. An objective of the project is to prevent further

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

land erosion under the bridge. The bridge and rock slope protection will be restored to their original condition. Therefore, there will be no impact from potential landslides.

b) Result in substantial soil erosion, loss of topsoil, or changes in topography or unstable soil conditions from excavation, grading, or fill? (Source: 5, 8) ☐ ☐ ☒ ☐

Discussion: The project site is currently developed with a bridge. The preventive maintenance on the existing bridge will expose project site soils during project construction activities. However, the exposure of soils during these activities will be short-term and subject to National Pollutant Discharge Elimination System (NPDES) requirements. One of these requirements is that "construction scheduling should facilitate installation of erosion and sediment control measures prior to construction start, detail time limits for soil stabilization after grading occurs, and schedule BMP maintenance." Once constructed, the project site will be covered by impervious materials. Embankment erosion repair and replacement of missing rock slope protection will be performed from areas which least impact the project site. Small loaders, barges and dump trucks will repair and replace the missing rock slope protection in a manner that minimizes impacts to environmentally sensitive areas adjacent to the existing bridge. Furthermore, strict construction access limits will be given and enforced with fences. With incorporation of these standards for design and construction (including the restoration of the rock slope protection), impacts from soil erosion or the loss of topsoil will be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Source: 1, 8, 9) ☐ ☐ ☐ ☒

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Source: 1, 8, 9) ☐ ☐ ☐ ☒

Discussion: c) – d) No problems related to off-site landslides, lateral spreading, subsidence, liquefaction, expansive soils, or collapse have been noted. The City of Huntington Beach General Plan notes that the project is located in an area of "variable" levels of expansive soil. It also indicated that the project area is not in an area of known subsidence. According to the State of California Seismic Hazards Zonation Program, the project is located within an area of potential liquefaction; however, the project is for preventive maintenance, and is intended to maintain the existing bridge in a structurally safe and serviceable condition, correct minor structural defects, and extend its service life. With the construction of this project, the stability of the soil will not be negatively affected. Restoration of embankment material will further stabilize slopes, so the stability of the soil will not be compromised. Therefore, the project will have no impact on its geologic stability. The project will not create substantial risk to life or property.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater? (Source: 5, 8)	☐	☐	☐	☒

Discussion: The project will perform preventive maintenance on the Magnolia Street Bridge. The project does not presently and will not generate wastewater with project implementation that will require the use of septic tanks or alternative wastewater systems. Therefore, no impact will result from the project.

IV. HYDROLOGY AND WATER QUALITY. *Will the project:*

a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

Discussion: Construction of the project will not violate water quality standards or waste discharge requirements. As part of a Stormwater Pollution Prevention Plan (SWPPP), the use of best management practices (BMPs) will be identified and implemented. Examples of BMPs include silt fencing and silt curtains for turbidity control. Also, sandbags and vacuum pumps may be used to collect construction related runoff. A final list will be identified in the SWPPP. Therefore, with compliance with existing regulations, project impacts on water quality will be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted?)	☐	☐	☐	☒

Discussion: No use of groundwater supplies is proposed and no adverse impacts to groundwater recharge will occur. The level of the local groundwater table will not be affected, and wells supporting existing or planned land uses will continue at the same level of production as without the project. Therefore, no impact will occur to groundwater supplies or groundwater recharge.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which will result in substantial erosion or siltation on or	☐	☐	☐	☒

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

off-site?

Discussion: The project involves the restoration of the embankment's missing rock slope protection to its original design and limits. Thus, the project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, which will result in substantial erosion or siltation on- or off-site. In addition, no impervious surface area or new columns are being added. Therefore, the project will result in no impact to existing drainage patterns or from erosion or siltation.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount or surface runoff in a manner which will result in flooding on or off-site? ☐ ☐ ☐ ☒

Discussion: The project will not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that will result in flooding on- or off-site. The project will not increase the amount of impervious surfaces, nor involve construction of new bridge columns. The project will not encroach onto the floodplain beyond the original conditions or alter any water source such that flooding will occur, and the floodplain will not be affected. Therefore, the project will result in no impact due to flooding.

e) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? ☐ ☐ ☐ ☒

Discussion: The project will not create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. As described in (d), above, the project will not generate additional stormwater runoff. Therefore, there will be no impact due to runoff.

f) Otherwise substantially degrade water quality? ☐ ☐ ☒ ☐

Discussion: The project will not substantially degrade water quality. With adherence to the requirements of the Regional Water Quality Control Board and the NPDES permit, the project will not be a source of additional polluted runoff that will substantially degrade water quality. Water quality measures in the form of approved BMPs will be identified and implemented during construction activities as part of a Stormwater Pollution Prevention Plan (SWPPP) to eliminate pollution from stormwater runoff. Examples of these BMPs will include the use of screen and filtering materials, silt fences, sandbags, and vacuum pumps to collect construction related runoff. Therefore, less than significant impacts will occur to water quality.

g) Place housing within a 100-year flood hazard area ☐ ☐ ☐ ☒

as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Source: 10)

Discussion: The project is located within a 100-year flood hazard area. The Magnolia Street Bridge (Bridge No. 55C0388) is over the Huntington Beach Channel. The Flood Insurance Rate Map (FIRM) for Orange County (Map Number 06059C0263J) indicates that the areas immediately adjacent to the bridge are located in Zone AE, or "Special Flood Hazard Areas that are subject to inundation by the 1% annual chance flood." The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. Although part of the adjacent area falls into Zone AE and into Zone X (areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 1% annual chance flood), no bridge widening is proposed, and no new columns or other structures that will affect water flow are proposed. The project construction involves repairing and rehabilitating the bridge and restoring the embankment and rock slope protection to their original designs. The project will not place housing within a 100-year floodplain. The project will not encroach onto the floodplain more than under the original conditions. Therefore, there will be no impact.

h) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒

Discussion: The project is already located within a 100-year flood hazard area, however; the work associated with the project will not place new structures within a 100-year flood hazard area that will impede or redirect flood flows. As discussed in previous sections, the project site involves repair and rehabilitation of the bridge. Also, the remediation of embankment erosion and restoration of rock slope protection to its original design and limits will improve the channel's capabilities as a flood control facility. No work involved with this project will cause alteration to flood flow levels. Therefore, no impact to flood flows will result.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

Discussion: The project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a dam. The project site involves the preventive maintenance of the bridge, as well as improvements to erosion control that will restore the channel to its original design. Therefore, there will be no impact in relation to flooding hazards except beneficial impacts.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow? (Source: 1)	☐	☐	☒	☐

Discussion: A seiche is an oscillation of a land-locked water body, such as a lake or reservoir behind a dam. The nearest lake is unnamed, and is located approximately 6,620 feet east of the project site. Due to the lake's size and distance from the project site, it is unlikely that the project site will be affected by a seiche. A tsunami is a large ocean wave associated with a seismic event. According to Figure EH-8 of the City of Huntington Beach General Plan, Environmental Hazards Element, the project site is not located within the Moderate Tsunami Run-Up Area. Mudflow may be caused by heavy rainfall that the soil cannot sufficiently drain or absorb. Soil and rock materials may become unstable and slide from their existing location as a result. If mudflow were to occur, implementation of measures included in the required SWPPP will protect the project from risk of mudflow and impacts related to mudflow would be less than significant. The work associated with the existing project site is located approximately one quarter mile from the Pacific Ocean. However, the bridge is an existing facility, and the preventive maintenance activities that are proposed to be conducted will not increase the likelihood or potential damage associated with inundation by seiche, tsunami, or mudflow.

k) Potentially impact stormwater runoff from construction activities?	☐	☐	☒	☐

Discussion: The bridge repair will require barrier replacement, deck repair, and restoration of the existing riprap under the bridge. Water quality measures in the form of approved BMPs will be implemented during construction activities to eliminate most pollution from any runoff from the site, and avoid a significant impact from stormwater runoff from construction activities. These BMPs will include the use of screen and filtering materials, sandbags, and vacuum pumps to collect construction related runoff. With implementation of BMPs as required in the General NPDES Permit, impacts related to stormwater runoff from construction activities will be reduced to less than significant levels.

l) Potentially impact stormwater runoff from post-construction activities?	☐	☐	☐	☒

Discussion: The project's purpose is to restore the site to its original condition when the bridge was constructed. The drainage patterns will remain the same since the bridge work will maintain its original surface areas, grades, and alignments, and no impacts will occur.

m) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	☐	☐	☒	☐

Discussion: Discharge of polluted stormwater from construction materials and equipment

handling will be less than significant because stormwater BMPs such as catch basins and temporary sandbag retention basins will collect construction materials and waste from equipment. There will be no vehicular refilling or equipment maintenance on the project site. Waste and hazardous handling storage, delivery, and outside work areas will meet local and State pollution control requirements. Also, silt fencing will be installed in upland areas in order to avoid any pollutants from entering the channel, including topsoil and construction debris. Additionally, construction activities will be preceded by the installation of turbidity control measures using silt curtains. There will be no impact during the operational phase, as there will be no vehicle or material storage areas. With implementation of these stormwater BMPs, impacts will be less than significant.

n) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters? ☐ ☐ ☐ ☒

Discussion: The project will be required to contain project-related construction water run-off within the project area during construction, and therefore will not change the stormwater runoff volume during storm events. The project will not increase either volume or velocity of stormwater during a stormwater event. There will be no discharge of stormwater to receiving waters, and no impacts will occur.

o) Create or contribute significant increases in the flow velocity or volume of stormwater runoff to cause environmental harm? ☐ ☐ ☐ ☒

Discussion: The existing drainage patterns will not be impacted and there will be no increased stormwater discharge since the bridge construction is focused only on structural repair of the existing deck and pier walls, and embankment improvements. The existing bridge and approach roadway will remain the same width, including alignment and grades. Missing rock slope protection underneath the bridge will be repaired to restore the eroded embankment.

p) Create or contribute significant increases in erosion of the project site or surrounding areas? ☐ ☐ ☐ ☒

Discussion: Since the project will maintain the existing alignment, bridge width, lines and grades, and drainage patterns, it will not contribute or create any additional erosion factors to the existing bridge location. Examples of erosion control BMPs include silt fencing, storm drain inlet protection, and fiber rolls. Also, sandbags and vacuum pumps may be used to collect construction related runoff. Final BMPs will be identified and implemented during construction activities as part of a Stormwater Pollution Prevention Plan (SWPPP) to eliminate pollution from stormwater runoff. No impacts will occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

V. AIR QUALITY. *Will the project*:

a) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source: 11, 12, 13, 14) ☐ ☐ ☒ ☐

Discussion: The project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for preparing a regional Air Quality Management Plan (AQMP) to improve air quality in the SCAB. The AQMP includes a variety of strategies to accommodate growth, to reduce the high levels of pollutants within the region, to meet State and federal ambient air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy.

The SCAQMD adopted its *CEQA Air Quality Handbook* (Handbook) to assist other public agencies with the preparation of air quality analyses. The SCAQMD-established thresholds for construction and operation emissions are used to evaluate impacts on regional air quality. The following acronyms for studied air pollutants are used in this section:

CO: Carbon monoxide
NO_x: Nitrogen oxides
O_3: Ozone
PM_{10}: Respirable particulate matter up to 10 micrometers in diameter
$PM_{2.5}$: Respirable particulate matter less than or equal to 2.5 micrometers in diameter
VOC: Volatile organic compounds

Note that since sulfur dioxide and lead are not of concern for a bridge preventive maintenance project, they are not discussed in the air quality analysis.

Air quality impacts are typically divided into two categories: short-term impacts and long-term impacts. Short-term impacts are associated with a project's construction activities, such as demolition, site grading, excavation, structural construction, paving, and finishing. Long-term impacts are associated with the operational activities of a project. **Table V-1** (SCAQMD Significance Thresholds) presents the significance thresholds for criteria air pollutants established by SCAQMD. A project is considered to generate a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table V-1. SCAQMD Significance Thresholds

Emission Rates	Pollutant Emission Threshold (lbs/day)				
	VOC	NO_x	CO	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	55
Operation	55	55	550	150	55

Source: "SCAQMD Air Quality Significance Thresholds." 2009. Diamond Bar, CA: South Coast Air Quality Management District, www.aqmd.gov/ceqa/handbook/signthres.pdf. March 2011. Accessed December 13, 2011.

Construction (Short-Term Impacts)

Construction of the project will generate temporary, short-term emissions of various air pollutants. Construction emissions can be distinguished as either on-site or off-site. On-site air pollutant emissions during construction will consist principally of exhaust emissions from heavy-duty construction equipment, and fugitive particulate matter from earth work and material handling operations. Off-site emissions will result from truck delivery of construction materials and hauling of construction debris, and workers commuting to and from the project site. Pollutant emissions will vary from day to day, depending on the intensity and type of construction activity.

The project will remove and replace the concrete barrier and unsound concrete on Magnolia Street Bridge and restore eroded embankment and missing rock slope protection underneath the bridge. Although construction will occur intermittently, the worst-case (maximum) daily construction emissions will be generated when the maximum number of pieces of construction equipment and haul trucks are operating during the same day. For purpose of this analysis, it was assumed that:

- A maximum of six pieces of construction equipment will be operating simultaneously on a given day.
- A maximum of four truck trips per day will occur for concrete hauling, and/or for materials delivery.
- Minimal fugitive dust from hauling rock for embankment erosion repair will be generated.
- There will be four construction phase types: remove and replace existing AC overlay; remove and replace concrete barrier and chain link railing; remove unsound concrete and patch bridge bents and columns; and restore embankment erosion and rock slope protection.
- Construction equipment will include: asphalt grinder, skid steer loader, tractor/loader, dump truck, concrete truck/pump, paver, jack hammer, sandblasting tool, air compressor, concrete mixer, and a tugboat-barge combination. (The barges will likely be pulled by small motors, but to be conservative, tugboats were considered in the analysis.)
- Construction will last approximately six months.

On-site and off-site emissions of criteria pollutants from construction activities were estimated

using CalEEMod emissions software. Estimates of the types of equipment anticipated in each phase of construction were based on the project description. Equipment exhaust emissions were determined using the CalEEMod default values for horsepower (hp) and load factors, with the exception of two pieces of equipment. The asphalt grinder was assumed to have 80 horsepower and a default CalEEMod load factor for "Other Construction Equipment," while the tugboat was assumed to have 300 horsepower and a load factor of 0.68. Estimated emissions from the project construction are shown in **Table V-2** (Maximum Project Construction Emissions) and are compared with the SCAQMD thresholds of significance. Note that the emission estimates do not take into account emission reductions per implementation of typical fugitive dust control measures that will be required to comply with SCAQMD Rule 403. Further, the emission estimates represent a worst-case scenario, when most construction equipment will occur on the same day. These worst-case predicted emissions will not be continuous, nor will they be typical of emission levels throughout the construction period.

As shown in **Table V-2**, the unmitigated maximum daily emissions will be below the SCAQMD significance thresholds for all criteria pollutants. Therefore, air quality impacts associated with construction of the project will be temporary and less than significant.

Table V-2. Maximum Project Construction Emissions

Emission Source	Pollutant Emission (lbs/day)				
	VOC	*NO_X*	*CO*	*PM_{10}*	*$PM_{2.5}$*
Maximum Daily Construction Emissions	4.59	31.31	18.25	2.16	1.90
SCAQMD Significance Thresholds	*75*	*100*	*550*	*150*	*55*
Significant?	**No**	**No**	**No**	**No**	**No**

Operation (Long-Term Impacts)

Operation of the project will not generate new stationary or mobile sources of emissions. Therefore, no long-term air quality impacts will be anticipated.

b) Expose sensitive receptors to substantial pollutant concentrations? (Source: 15) ☐ ☐ ☒ ☐

Discussion: Sensitive receptors are persons who are more susceptible to air pollution than the general population, such as children, athletes, the elderly, and the chronically ill. Examples of land uses where substantial numbers of sensitive receptors are often found are schools, daycare centers, parks, recreational areas, medical facilities, nursing homes, and convalescent care facilities. Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants.

Construction (Short-Term Impacts)

Construction of the project will be intermittent and short-term, and will not generate a substantial amount of air pollutants, as illustrated in **Table V-2**. In addition, construction will occur during

the daytime on weekdays, when most people are away from their homes, thus minimizing the number of people who might be affected. A screening analysis based upon the SCAQMD's localized significance threshold (LST) methodology was performed to determine localized exposures. **Table V-3** (Results of Localized Significance Screening Analysis) show the results. Localized exposures will be less than significant.

Table V-3. Results of Localized Significance Screening Analysis

Pollutant	Distance From Receptor (m)[a]	Calculated Emissions (lbs/day)	Threshold Emissions (lbs/day)	Exceeds Threshold?
NO_x	73	31.20	133	No
CO	73	17.24	1,294	No
PM_{10}	73	1.90	25	No
$PM_{2.5}$	73	1.89	7	No

[a] The Final Localized Significance Threshold Methodology from SCAQMD represents distances in meters.

Operation (Long-Term Impacts)

Operation of the project will not generate any new sources of criteria pollutant emissions. Therefore, no operational impacts will occur.

c) Create objectionable odors affecting a substantial number of people? (Source: 5, 16) ☐ ☐ ☒ ☐

Discussion: Construction of the project will potentially generate odors due to operation of construction equipment (diesel exhaust). These odors, which will be temporary in nature, will occur during daytime hours only and be isolated to the immediate vicinity of the construction activities. They will not affect a substantial number of people and the impact will be less than significant.

Operation of the project will not introduce any new significant odor generating sources, such as wastewater treatment facilities, landfills, or other industrial land uses that generate objectionable odors. Therefore, no impact will occur.

d) Conflict with or obstruct implementation of the applicable air quality plan? (Source: 17, 55) ☐ ☐ ☐ ☒

Discussion: The SCAQMD is required to produce plans to show how air quality will be improved in the region. The California Clean Air Act requires that these plans be updated triennially to incorporate the most recent available technical information. A multi-level partnership of governmental agencies at the federal, State, regional, and local levels implements the programs contained in these plans. Agencies involved include the U.S. Environmental Protection Agency

(USEPA), the California Air Resources Board (CARB), local governments, the Southern California Association of Governments (SCAG), and the SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the SCAB. The SCAQMD updates its AQMP every three years. The 2012 AQMP, which is the latest, was adopted by the SCAQMD Board on December 6, 2012 and submitted to the CARB and the USEPA for concurrent review on December 20, 2012. The plan identifies control measures needed to demonstrate attainment with the federal 24-hour standard for $PM_{2.5}$ by 2014 in the South Coast Air Basin. In addition, the 2012 AQMP provides updates on progress towards meeting the 8-hour ozone standard for 2023, an attainment demonstration for the revoked 1-hour ozone standard, a vehicle miles traveled (VMT) offset demonstration for ozone standards, and a report on the health effects of $PM_{2.5}$.

The project is designed to perform preventive maintenance on the Magnolia Street Bridge. Implementation of the project will not affect population, housing units, or employment or otherwise be inconsistent with the growth forecasts identified in the AQMP. Furthermore, the project was included in the regional emissions analysis conducted by SCAG for the conforming 2008 Regional Transportation Plan (RTP), *Transportation Conformity Report*. The project is also included as RTP I.D. ORA020501 in SCAG's 2011 Federal Transportation Improvement Program (FTIP), including Amendments #1 to #15 and #17 to #38. The project's design concept and scope have not changed significantly from what was analyzed in the RTP. Therefore, the project will be consistent with the 2007 AQMP and no impact will occur with the project's implementation.

e)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Source: 11, 15)	☐	☐	☒	☐

Discussion: The SCAB is currently in non-attainment for both the state and federal ambient air quality standards for O_3, PM_{10} and $PM_{2.5}$, and in non-attainment for the state nitrogen dioxide (NO_2) standard. During construction, the project's emissions of NO_x and ROG (the O_3 precursors), and PM_{10} and $PM_{2.5}$ will not exceed SCAQMD thresholds. Given the intermittent and short-term nature of construction emissions, the impacts will be less than significant.

The project will not have any new sources of criteria pollutant emissions. Further, the project will not be population and/or job growth inducing, and therefore will be consistent with the AQMP. Therefore, a cumulatively considerable air quality impact will not occur.

VI. TRANSPORTATION/TRAFFIC. *Will the project:*

a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking	☐	☐	☒	☐

into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (Source: 1, 18)

Discussion: The project will conduct preventive maintenance on an existing bridge on Magnolia Street. Magnolia Street is designated as a primary arterial street, with a vehicle capacity of 30,000 average daily trips (ADT) with No Parking posted on both sides of the street from PCH north through the bridge area to Banning Avenue. It is currently classified as a Class II bikeway, and is also an existing transit route. The project will not conflict with the current Orange County Congestion Management Program (CMP), which requires that CMP Highway System (CMPHS) intersections maintain a LOS grade of "E" or better, unless the baseline is lower than "E." Traffic handling and control will provide a minimum of one (1) traffic lane and one (1) bicycle lane in each direction open at all times. The project is temporary and will not result in long-term impacts associated with the performance of the existing circulation system. During construction, transit routes will remain the same; however, transit stops will be relocated a short distance away by OCTA and will be maintained by OCTA. Similarly, the bicycle route on Magnolia Street will remain accessible. Therefore, the project will not conflict with an applicable plan or policy that measures effectiveness of the circulation system, including intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (Source: 1, 18) ☐ ☐ ☐ ☒

Discussion: As stated above, the current CMP requires that CMPHS intersections maintain a LOS grade of "E" or better, unless the baseline is lower than "E." The segment of Magnolia from Atlanta to Pacific Coast Highway (PCH) is currently operating at LOS C or better, and PCH is currently operating at LOS E. Access to one (1) traffic lane in each direction will restrict traffic during construction; the restriction may result in a short-term increase in vehicular congestion. CMP legislation specifies that construction be excluded from deficiency determination. After the maintenance activities have been completed, no increase in traffic will result. Implementation of the project will neither generate additional vehicle trips nor lower the level of service. Therefore, the project will not conflict with the CMP LOS for designated roads or highways.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Source: 5, 19) ☐ ☐ ☐ ☒

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: The project site is located approximately 5.6 miles southwest of the nearest airport, the John Wayne Airport, and will not require additional freight or passengers that will affect air traffic patterns. Therefore, the project will not result in any impacts to traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses? (Source: 5) ☐ ☐ ☐ ☒

Discussion: The project will conduct preventive maintenance on an existing bridge to restore the bridge's original design. It will not introduce new design features or incompatible uses, and therefore, will not substantially increase hazards. No impacts will occur.

e) Result in inadequate emergency access? (Source: 1, 5) ☐ ☐ ☒ ☐

Discussion: The project will conduct preventive maintenance on an existing bridge, and will not alter access to and from the bridge on a permanent basis. During the bridge deck resurfacing phase, one lane will be temporarily restricted, but two-way traffic will be maintained without negatively affecting emergency access. Therefore, the project will result in less than significant impacts to emergency access.

f) Result in inadequate parking capacity? (Source: 5) ☐ ☐ ☐ ☒

Discussion: Magnolia Street from Pacific Coast Highway through the project area is posted as a "No Parking" zone. This condition will remain in the post-construction condition. Construction-related vehicles may use the Orange County Flood Control District right-of-way, which may be used as construction staging areas. Therefore the project will not have an impact on parking or parking capacity.

g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (Source: 1, 5) ☐ ☐ ☒ ☐

Discussion: Magnolia Street, where the project is located, is currently classified as a Class II bikeway, and is an existing transit route. During construction activities, transit routes will be temporarily altered. However, with implementation of a city approved traffic control plan, impacts will be reduced (see Magnolia Street Bridge Preventive Maintenance Traffic Control Plans Sheet TC1-TC4 of Attachment #1). Implementation of the project will alter neither the bikeway classification nor transit service on a permanent basis. Therefore, the project will not conflict with adopted policies, plan, or programs supporting alternative transportation and any impacts will be less than significant.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

BIOLOGICAL RESOURCES

Will the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S, Fish and Wildlife Service? (Source: 14, 16, 27, 44, 46) ☐ ☒ ☐ ☐

Discussion: As discussed in Source Reference No. 27: *Draft Natural Environment Study* and summarized herein, surveys conducted prior to preparation of this Initial Study indicate the need to incorporate mitigation measures (Biological Resources [**BR 1-1, 1-2**]) to reduce potential impacts below significant levels for special-status species that have a moderate or greater potential to occur on the project site. These mitigation measures are in addition to the PDFs incorporated in the project to avoid impacts.

The implementation of **BR-1, Workers Environmental Awareness Program,** below will inform construction personnel of the likelihood of occurrence of special-status species and ensure that the project will not significantly impact these species or their associated habitats.

Likewise, the implementation of **PDF-1** and **BR-2, Biological Monitoring,** below will ensure that project activities will not extend beyond the necessary construction footprint into the ESHA. In addition, **BR-2** will ensure that the project meets regulatory requirements concerning special-status plants and wildlife species. Monitoring will focus on findings resulting from implementation of **PDF-2** through **5** and **PDF-7** and forthcoming permit requirements.

With the implementation of the PDFs and mitigation measures, impacts from project activities to species identified herein will be less than significant.

BR-1: Implement Workers' Environmental Awareness Program

The presentation of a Workers' Environmental Awareness Program (WEAP) will decrease the likelihood of incidental impacts to special-status species on the project site. Prior to construction activities, a qualified biological monitor will present a WEAP to all construction personnel. The WEAP will also be given to any new personnel who work onsite during the duration of the project. The purpose of the WEAP is to inform the construction personnel of the special-status species that will likely occur in the project area, species identification, and the conservation measures implemented to protect the biological resources onsite. The WEAP will incorporate any special-status species that are discovered during project activities.

BR-2: Conduct Biological Monitoring

Because this project is within sensitive wetlands managed by the HBWC, it is necessary for the biological resources of this project to be monitored during construction for the duration of project. A qualified and/or permitted biologist will be essential for conducting this monitoring.

A **qualified biological monitor** is an individual who has professional experience working with the dominant flora and fauna of southern California present in the project area. He or she is knowledgeable of the life history and survey techniques (including formal protocols) for salt marsh and coastal sage scrub species, specifically federal/State listed species and special status species. He or she has professional experience in construction monitoring and finding and monitoring bird nests, and is familiar with biological regulations, particularly those pertaining to migratory birds and their nests.

A **permitted biologist** is an individual who can serve as a qualified biologist and also holds a scientific permit, issued by the United States Fish and Wildlife Service under Section 10(a)(1)(A) of the federal Endangered Species Act. He or she has professional knowledge and experience with special-status species, specifically the federal/State listed species and special status species. Such a biologist has several years of experience in field surveys and species monitoring. A permitted biologist also possesses all of the qualifications of a qualified biologist described above.

A qualified biological monitor (qualified biologist) will be present during all vegetation clearing activities, if any, to monitor habitat conditions and construction impacts at the project site and ensure that impacts remain less than significant.

Following the initial vegetation clearing and grading activities, the biological monitor will be present *up to 8 hours every two weeks, outside of nesting season*, or as deemed appropriate by regulatory agencies, to ensure that project-related activities do not incur impacts greater than anticipated. *During nesting season*, the biological monitor should be present *up to 8 hours weekly,* or as deemed appropriate by regulatory agencies, to survey for nesting birds, with focus on special-status and MBTA-protected species.

The monitor will establish a buffer area around any occupied special-status or MBTA-protected species nests that are discovered, as described in **PDF-4**. A permitted biologist will be used if required by the resource agencies; otherwise an experienced, qualified biologist will conduct the

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
surveys.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? (Source: 15, 44, 46, 47)	☐	☒	☐	☐

Discussion: The following habitat communities and jurisdictional areas may be temporarily impacted by project activities. See Chapter 4 of Source Reference No. 27: *Draft Natural Environment Study* for a more detailed discussion of impacts and mitigation to biological resources.

Southern Coastal Salt Marsh – These tidal marshes (comprised of "pickle weed mats," "disturbed alkali sinks," and "salt grass flats") are found in the lands owned by Huntington Beach Wetlands Conservancy south and west of the Huntington Beach Channel, on both sides of Magnolia Street. No salt marsh vegetation is within the project footprint. However, there is the potential for temporary impacts to this community when establishing staging and laydown areas. Avoidance and minimization measures, as described in PDFs will reduce the potential for impacts to native vegetation to a less than significant level.

Critical Habitat - A literature review was conducted using USFWS Critical Habitat Portal (USFWS Critical Habitat Portal, 2013) to search for these areas that are essential for federally listed species that may require special management under ESA. Three designated critical habitat areas were found within a two-mile-radius search, but none occur within the BSA; therefore, impacts to critical habitats are not anticipated at this time. However, potential impacts to high value habitats in the surrounding areas will be reduced to a less than significant level through implementation of PDFs and best management practices.

Marine Protected Areas - No Marine Protected Areas (MPAs) overlap with the BSA. The two closest MPAs are the Bolsa Bay State Marine Conservation Area (SMCA), approximately 4.6 miles northwest, and Upper Newport Bay SMCA, approximately 4.3 miles southeast. Therefore, impacts to MPAs are not anticipated at this time. However, potential impacts to aquatic resources in the surrounding areas will be reduced to a less than significant level through implementation of PDFs and best management practices.

Eelgrass Beds - Eelgrass beds are important ecological communities because they serve as predation refuge and a food source to many estuarine species. Within the project footprint there is approximately 0.144 acre of eelgrass beds. See Appendix E of Source Reference No. 27: *Draft Natural Environment Study* for the Essential Fish Habitat Assessment, which includes avoidance and minimization efforts designed to conserve this Habitat Area of Particular Concern. PDFs and best management practices, as well as forthcoming permit requirements, will be implemented. These include but are not limited to pre- and post-construction surveys (PDF-7: Eelgrass Surveys) in accordance with the "Southern California Eelgrass Mitigation Policy" (SCEMP, 1991) Revision 11 adopted by the National Marine Fisheries Service. With avoidance and minimization efforts, neither measurable adverse impacts nor permanent impacts to eelgrass beds are anticipated at this time. **Table VII-2** (Jurisdictional Waters and Urban Impacts Table) summarizes the impacts to each habitat type and jurisdictional area and the associated mitigation ratios typically required by the resource agencies.

Biological resources are naturally occurring plants, animals, and habitats in a given area. The two main agencies that regulate and protect biological resources in California are the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW, before January 1, 2013 named California Department of Fish and Game). Each agency has classifications for species that are vulnerable to extinction; these classifications are referred to in general terms as "special-status." The primary law that defines special-status biological resources at the federal level is the Federal Endangered Species Act (FESA), which is enforced by the USFWS. Likewise, the State of California has conferred protections to special-status biological resources in California through the California Endangered Species Act (CESA), which is enforced by the CDFW. *Endangered* species are in danger of becoming extinct through all or a significant portion of their ranges. *Threatened* species are those species that are likely to become endangered within the foreseeable future. In addition, CDFW classifies species that are vulnerable to become listed as threatened, endangered, or extinct, as "species of special concern." Both USFWS and CDFW also have jurisdiction to protect migratory birds under the Migratory Bird Treaty Act (MBTA) and Section 3513 of the California Fish and Game Code (CFGC) respectively. Each agency protects the species that it has defined as special-status, but they do not regulate each other's species, unless they have defined them with the same status. Since this project is a federally-funded local action, it is subject to the provisions of FESA and CESA.

The California Native Plant Society (CNPS) is an organization that monitors the status of plants native to California and determines whether they are vulnerable to extinction. CNPS designates ranks that indicate how likely a plant species is to become extinct within the state of California. Plant species assigned a rank of 1 are rare within the state of California and elsewhere and those with the rank of 2 are defined as rare within California but more common elsewhere. Although the CNPS is not a government agency, any federal and/or state action in California considers impacts to rank 1 and 2 plants that have the potential to worsen their status.

In addition to protecting plants and wildlife, the Federal Government and CDFW also protect special-status habitats and rare ecosystems, including riparian habitats within and adjacent to waterways. The Federal Government, through the U.S. Army Corps of Engineers (USACE), protects jurisdictional wetlands as defined by Section 404 of the Clean Water Act. CDFW protects jurisdictional wetlands/streambeds according to Section 1600 *et seq.* of the CFGC. Lastly, the National Marine Fisheries Service (NMFS) protects aquatic habitats that are vital to the survival of marine fisheries; the Magnuson-Stevens Act defines these habitat areas as "Essential Fish Habitat" (EFH). In Section 1700 of the CFGC, the State of California defines protections for aquatic life. The code calls for the cultivation of local commercial fisheries.

Existing Setting:

The project is located immediately adjacent to and within the Magnolia and Brookhurst marshes, within the Huntington Beach Wetlands. The Huntington Beach Wetlands include tidally influenced saltwater marshes that receive seawater via Talbert Channel and freshwater nuisance runoff via the Huntington Beach municipal stormwater system, which empties into Huntington Beach Channel.

The biological study area (BSA) includes the project footprint and the associated 500-foot buffer zone. To the southwest and south of Magnolia Street Bridge are stands of salt marsh vegetation. These stands are dominated by pickleweed (*Salicornia* spp.) and salt grass (*Frankenia salina*), two types of coastal saltmarsh wetland. North and northeast of the bridge are developed lands.

Immediately next to the roadside, north of the bridge and east of the channel, is a landscaped area with lawn grass and ornamental coniferous trees. North of the channel and east of the road there is a large stand of non-native crystalline ice plant (*Mesembryanthemum crystallinum)* with some stands of native pickleweed interspersed throughout. Included amongst the diverse biological resources are a number of special-status species, such as Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), which are known to breed within the BSA (See **Figure 1-3:** *Magnolia Bridge Project Jurisdictional Impacts Map*).

Baseline Data/Background Research:

References consulted to determine which special-status resources are within the project area included the California Natural Diversity Database (CNDDB). The CNDDB maintains records of all known special-status biological resources throughout the state of California. Records from the CNDDB within a 10-mile radius of the project site were reviewed to identify species that have the potential to occur in the project area.

A reconnaissance biological survey was performed within the BSA on August 25, 2011, by biologists Michelle Tollett and Mario Mariotta. A subsequent survey of the BSA was conducted on July 3, 2012 by biologists Michelle Tollett, Hugo Flores, Michael Bourdon, Mario Mariotta, and Elizabeth Kempton to confirm species identified in 2011 and to meet with Gordon Smith (Director, HBWC) and Christine Whitcraft (CSULB). A preliminary jurisdictional delineation was conducted by biologists Michelle Tollett, Sarah Yazouri, and Angela Minnameyer on November 21, 2012. HBWC requested that UltraSystems' biologists not enter its land to avoid the sensitive marsh habitat. Therefore field observations were made using binoculars from various points on trails in the BSA. See Chapter 2.2-2.3 of Source Reference No. 27: *Draft Natural Environment Study* for a detailed account of studies required and survey visit information.

The biological surveys identified the biological resources (plant and animal species), the habitats present and other environmental factors related to biological resources (i.e. developed land, human use of the project area, climate, etc.) in the BSA. This information was referenced to evaluate the likelihood for special-status species to occur within the project buffer. The data gathered during the biological survey were augmented by background research conducted through interviews with agency staff, members of the HBWC and a literature review. In addition, plant and bird surveys conducted by HBWC were used to supplement UltraSystems' data because of the HBWC's knowledge of the resources on site and because UltraSystems' biologists were not permitted to enter HBWC lands.

Background research and observation during field surveys indicated that many special-status species have a considerable potential to, or do, occur in the project area. The special-status species are listed with their status in **Table VII-1** (Special Status Species with the Potential to Occur in the BSA) below. (Also see "Table 1: Special Status Species with the Potential to Occur in the Biological Study Area," in Source Reference No. 27: *Draft Natural Environment Study*.)

Table VII-1: Special Status Species with the Potential to Occur in the Biological Study Area

Species Name (*Scientific Name)*	Status	Occurrence Potential
VEGETATION		
Aphanisma (*Aphanisma blitoides*)	1B1.2	Moderate
Southern tarplant (*Centromadia parryi ssp. australis)*	1B.1	High
Salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum)*	FE, SE, 1B.2	High
Coulter's goldfields (*Lasthenia glabrata ssp. coulteri)*	1B.1	High
Coast woolly heads (*Nemacaulis denudata* var. *denudata*)	1B.2	Observed*
Estuary seablite (*Suaeda esteroa)*	1B.2	Observed
WILDLIFE		
Western snowy plover (*Charadrius nivosus nivosus*)	FT, SSC	High
Northern harrier (*Circus cyaneus*)	SSC	Observed
Belding's savannah sparrow (*Passerculus sandwichensis beldingi)*	SE	Observed
California brown pelican (*Pelecanus occidentalis californicus)*	DFG-FP	Observed
Black skimmer (*Rynchops niger*)	SSC	Observed
California least tern (*Sternula antillarum browni*)	FE, SE	Observed
Peregrine falcon (*Falco peregrinus*)	FP	Observed
Light-footed clapper rail (*Rallus longirostris levipes*)	FE, SE	Moderate
HABITAT		
Eel grass *(Zostera marina)*	HAPC	Observed
Southern Coastal Salt Marsh		Observed

Key: FE Federally-listed Endangered Species FT Federally-listed Threatened Species * Observed outside BSA; see text.	SE State-listed Endangered Species SSC State Species of Special Concern FP Fully Protected 1B CNPS Ranked Rare Plant, Rare in California and Elsewhere HAPC Habitat Area of Particular Concern/ Essential Fish Habitat

Impact Discussion

Special-status Plants

Estuary seablite (*Suaeda esteroa)* a California Native Plant Society Rank 1B.2, has been observed near the Magnolia Street Bridge by HBWC. Implementation of **PDF-3:** *Conduct pre-construction survey for estuary seablite, coast woolly heads, and other special-status plant species; flag for avoidance*, will aid to identify newly established populations of special-status plants, should they occur.

Coast woolly heads were observed outside of the BSA, in the sand dunes across Pacific Coast Highway. Although this species is not expected to occur within the project impact area, implementation of **PDF-3** will aid to identify newly established populations of special-status plants, should they occur.

Special-status Birds

The wetland vegetation within the project buffer provides foraging habitat for light-footed clapper

rail and California least-tern; which are federal and state endangered species; western snowy plover, a federal threatened species; and Belding's savannah sparrow (BSSP), a California state endangered species; and other special status species described in **Table VII-1**. Additionally, the wetland vegetation within the project buffer provides typical nesting habitat for Belding's savannah sparrow (*Passerculus sandwichensis* ssp. *beldingi).*

Complete avoidance is planned for all areas of pickleweed marsh, the primary nesting and foraging habitat for BSSP. It is advised to schedule construction activities outside of nesting season, generally February to September.

Potential to adversely affect special-status birds will be avoided or minimized through implementation of **PDF-4**. Additionally, conservation measures contained within the forthcoming CDFW 2081 Concurrence Letter/Incidental Take Permit and/or USFWS Section 7 Consultation will provide appropriate actions necessary to avoid and minimize impacts to resident and/or nesting federal/State listed species and other special status species within the BSA.

Jurisdictional Areas

Portions of the saltmarsh vegetation within the BSA qualify as USACE jurisdictional wetlands based on the three-parameter system in the *1987 Wetlands Delineation Manual*. However, there is no saltmarsh vegetation within the project footprint. The Huntington Beach Channel is considered USACE Waters of the United States (WOUS) and CDFW Waters of the State (WOUS). The project is also within the State of California Coastal Zone. The National Marine Fisheries Service (NMFS) regards Huntington Beach Channel as groundfish Essential Fish Habitat. Finally, eelgrass, a Habitat Area of Particular Concern (HAPC), which is a type of EFH, is present. Eelgrass is considered a special aquatic site, specifically in vegetated shallows, and is under USACE jurisdiction.

See Chapter 5 of Source No. 27: *Draft Natural Environment Study* for a detailed description of consultations with the aforementioned agencies.

Table VII-2: Jurisdictional Waters and Urban Impacts

MAGNOLIA STREET BRIDGE					Temporary Impact			Permanent Impact			Planned Restoration Mitigation Ratios			Discussion
Jurisdictional Category	Other Agencies	Zone	Habitat Type	Map Code	Acres	Area (sqft.)	Length (ft.)	Acres	Area (sqft.)	Length (ft.)	Ratio	Temporary + Permanent Impact Area (Acres)	Temporary + Permanent Impact Area (sqft.)	
JURISDICTIONAL WATERS														
CDFW "WOTS"	RWQCB, CCC	Bankline above Tide line	Degraded RSP (Revetment)	Purple	0.021	905	123		0.00		1 : 1	0.021	905	Temporary impacts to this area of degraded RSP. No mitigation required. This area will be returned to the contours of the project's original design. All Project Design Features and Best Management Practices will be implemented.
			Intact RSP	Purple	0.062	2,700	200		0.00					This area is intact RSP and may be temporarily impacted by construction activities; however, maintaintaining this RSP in place is sufficient mitigation for this area.
					0.083	3,605	N/A		0.00					
USACE / CDFW "WOTS/WOUS"	RWQCB, NOAA NMFS, CCC	Intertidal	Degraded RSP (Revetment)	Yellow	0.087	3,803	245		0.00		1 : 1	0.087	3,803	This area is intact RSP and may be temporarily impacted by construction activities; however, maintaintaining this RSP in place is sufficient mitigation for this area.
			Intact RSP	Yellow	0.051	2,299	310							Temporary impacts to this area of degraded RSP. No mitigation required. This area will be returned to the contours of the project's original design. All Project Design Features and Best Management Practices will be implemented.
		Subtidal	Open tidal channel	Blue	0.436	19,034	295							
		Open water, Tidal waters			0.574	25,137	N/A		0.00					
USACE / CDFW "SPECIAL AQUATIC SITE"	RWQCB, NOAA NMFS, CCC	Subtidal	Eelgrass beds "HAPC/EFH"	Green	0.144	6,285	N/A		0.00		1.2 : 1	0.173	7,542	Consultation in progress with NMFS, CDFW, USACE, RWQCB, and CCC. Impacts to eelgrass will be avoided to the maximum extent feasible. Project Design Feature 6 (PDF-6) A (Pre-construction Survey) and B (Post Construction Survey) will be implemented to determine compensatory mitigation requirements, if any.
		Wetland (NOT to be added to subtidal area)			0.144	6,285	N/A		0.00					
TOTALS for each AGENCY														
				USACE	0.574	25,137								
				CDFW	0.657	28,742								
				RWQCB	0.657	28,742	N/A		0.00					
				NOAA NMFS	0.657	28,742								
				CCC	0.657	28,742								
			Jurisdictional Waters Grand Totals		0.657	28,742	N/A		0.00					
UPLAND														
OC Flood Right of Way			Urban (concrete or dirt road)	Grey	0.237	10,347	409		0.00		1 : 1	0.237	10,347	Technically, no mitigation required, this area urban landscaping, concrete path or packed dirt in the OC Flodd ROW to be used for staging and will be returned to original design. All Project Design Features and Best Management Practices will be implemented.
					0.237	10,347	409		0.00					**Technically, no mitigation required, this area urban landscaping, concrete path or packed dirt in the OC Flodd ROW to be used for staging and will be returned to original design. All Project Design Features and Best Management Practices will be implemented.**
			Urban Total		0.237	10,347	409		0.00					
			Project Footprint Total		0.894	39,089	409		0.00					Totals need to be approved by the agencies.

*WOTS=Waters of the State (CDFW and RWQCB)
**WOUS=Waters of the United States (USACE)

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Source: 16, 45)	☐	☒	☐	☐

Discussion:

Jurisdictional Waters – The Huntington Beach Channel is considered jurisdictional (WOUS). WOUS are defined in 33 CFR Part 328 and may include lakes, rivers, streams (ephemeral, intermittent, perennial), mudflats, vegetated shallows, ditches, ponds, and wetlands and, when they are connected to a traditional navigable waterway (TNW), waters within the high tide line. The bank on the west side of the Huntington Beach Channel is vegetated with wetland indicator plants that legally characterize those stands as special aquatic sites classified as "wetlands" as previously described herein. The Huntington Beach Channel is also considered jurisdictional by CDFW under the Fish and Game Code as waters of the State (WOTS). WOTS are "any surface water or groundwater, including saline waters, within the boundaries of the state" [Water Code Section 13050(e)]. WOTS generally extends from "bank-to-bank" of a waterway.

USACE wetlands are present in the form of salt marsh within the BSA. There is a mosaic of USACE special aquatic sites, vegetated shallows and mudflats throughout the BSA. Typical mudflats occur outside of the project area, with degraded RSP and open water with soft bottom channel comprising the majority of the project footprint. Eelgrass beds are located within the project footprint, but are largely absent from the revetment area. In anticipation of compliance with Sections 401 and 404 of the Clean Water Act (CWA) the BSA was reviewed to determine the presence of Jurisdictional Waters of the United States including wetlands, as recognized by USACE (Figure 7: Jurisdictional Impacts Map of Source Reference No. 27: *Draft Natural Environment Study*). After desktop review, a field visit was conducted by biologists Michelle Tollett, Sarah Yazouri, and Angela Minnameyer on November 21, 2012. A Preliminary Jurisdictional Determination Form is presented in Appendix F of Source Reference No. 27: *Draft Natural Environment Study.*

It was determined that WOTS and WOUS occur within the BSA and within the project boundary. Above the high tide line there is approximately 0.083 acre of WOTS (0.021 acre of degraded RSP and 0.062 acre of intact RSP). Within intertidal and subtidal zones (USACE and CDFW jurisdictional areas) there is approximately 0.574 acre of WOUS/WOTS (0.087 acre of degraded RSP, 0.051 acre of intact RSP, and 0.436 acre of open tidal channel) in the project footprint. See Table 2: Jurisdictional Waters and Urban Impacts Table of Source Reference No. 27: *Draft Natural Environment Study.* This preventive maintenance project will restore pre-existing, degraded RSP to original design specifications to protect and maintain the integrity of Magnolia Street Bridge. Work areas disturbed to accomplish this maintenance project will be enclosed with turbidity curtains and booms. Water quality best management practices will be implemented, as appropriate. Work areas will be returned to original contours within the soft bottom channel;

therefore, impacts to jurisdictional waters are considered temporary at this time.

All other repair work will occur on bridge piers or decks above the water line. With avoidance and minimization and implementation of the Project Design Features, significant impacts to Jurisdictional Waters are not anticipated. See Table 2: Jurisdictional Waters and Urban Impacts Table.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites? (Source: 17, 18, 44, 46, 47) ☐ ☐ ☒ ☐

Discussion: CDFW-designated wildlife corridors (a functional network of connected wildlands essential for ecological connectivity and biodiversity) do not occur near the project site; therefore impacts to migration corridors are not anticipated at this time. However, the Huntington Beach Wetlands and the Pacific Flyway function as smaller scale, localized natural connectivity areas that are utilized by wildlife. PDFs and best management practices will be implemented to reduce potential temporary impacts to surrounding habitats used by resident and migratory wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Source: 21) ☐ ☐ ☐ ☒

Discussion: It is not expected that the project will conflict with any local policies or ordinances protecting biological resources. There are no mature trees within the project impact area and the project is consistent with city ordinances and policies. Therefore, no impacts will result.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Source: 19) ☐ ☐ ☐ ☒

Discussion: No HCP, NCCP, or other approved local habitat conservation plans have jurisdiction in the project area. The closest NCCP is the Orange County Central and Coastal Subregion Natural Community Conservation Plan (OC NCCP), which does not include the City of Huntington Beach. Therefore, no impacts will occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

VIII. MINERAL RESOURCES. *Will the project:*

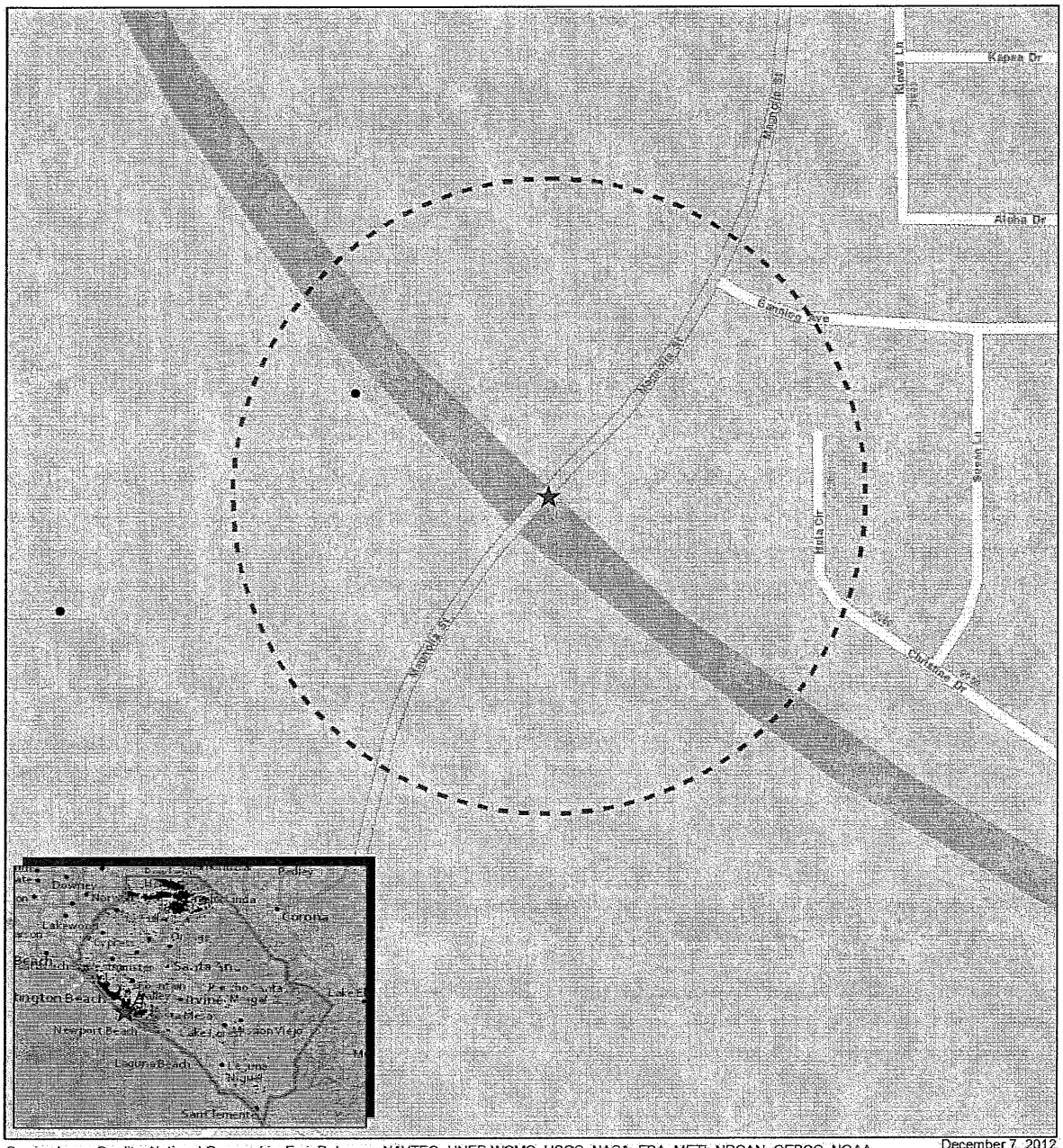
a) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state? (Source: 1) ☐ ☐ ☐ ☒

Discussion: Although the City of Huntington Beach has been the site of oil and gas, sand and gravel, and peat extraction, only one oil well is located within 500 feet of the project site (**Figure VIII-1**). No other mineral resources are located near the project. The project will perform preventive maintenance on an existing bridge. Implementation of the project will therefore not affect the oil well. The project will have no impact in the loss of availability of a known mineral resource that will be of value to the region and residents of the state.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? (Source: 1) ☐ ☐ ☐ ☒

Discussion: The project site is not located within a mineral resource recovery site delineated in the City's General Plan. Therefore, the project will have no impact resulting in the loss of availability of a locally important mineral resource recovery site.

Figure VIII-1: Mineral Resources, Oil and Gas Wells in Project Vicinity



Service Layer Credits: National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, iPC, Sources: Esri, DeLorme, NAVTEQ, TomTom, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand); UltraSystems Environmental Inc., 2012; USGS, 2005; California Department of Conservation, Oct., 2012

December 7, 2012

Scale 1:2,400
1 Inch = 200 Feet

N

Feet
0 100 200

Meters
0 50 100

Legend

- Magnolia Bridge Location
- 500- Foot Radius
- Mineral Resource
- Oil and Gas Well
- Orange County Boundary

Magnolia Street Bridge
Mineral Resources and
Oil and Gas Wells

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

IX. HAZARDS AND HAZARDOUS MATERIALS. *Will the project:*

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ☐ ☐ ☐ ☒

Discussion: The project will conduct preventive maintenance on an existing bridge. After the maintenance work has been completed, no routine transport, use, or disposal of hazardous materials that is not already in practice (e.g. the use of sealants on the asphalt surface of the roadway, painting, replacement of street lighting, and other materials associated with the routine maintenance of above ground infrastructure) will occur. No impacts will occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ☐ ☐ ☒ ☐

Discussion: Hazardous materials that are used during construction (e.g., petroleum-based products, paints, solvents, sealers, etc.) will be transported, used, stored and disposed of according to City, County, state, and federal regulations. Any reasonably foreseeable upset and accident condition involving these materials could occur with or without implementation of the project. The project will conduct preventive maintenance on an existing bridge. With adherence to existing construction standards and requirements, the risk of release of hazardous materials into the surrounding environment is low. Less than significant impacts will occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school? (Source: 3) ☐ ☐ ☐ ☒

Discussion: There are no schools within one-quarter mile of project site. While road sealant and paint may emit odors, they are safe for use outdoors or in well-ventilated areas. No impacts will occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment? (Source: 39) ☐ ☐ ☐ ☒

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: A search of California's Department of Toxic Substances Control EnviroStor website did not identify any Federal Superfund Sites, State Response Sites, Voluntary Cleanup Sites, School Cleanup Sites, Permitted Sites, or Corrective Action Sites on the project site or immediately adjacent to project site. Therefore, no project impact will result.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or pubic use airport, will the project result in a safety hazard for people residing or working in the project area? (Source: 20, 40) ☐ ☐ ☐ ☒

Discussion: The John Wayne Airport, Santa Ana, located about 5.6 miles to the northeast, is the closest airport to the project. Therefore, the project will not result in a safety hazard for people residing or working in the project area.

f) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area? ☐ ☐ ☐ ☒

Discussion: The project is not in the vicinity of a private airstrip and will conduct preventative maintenance on an existing bridge only. Thus, the project will not generate a safety hazard for people residing or working in the project area relative to the current land use, and no adverse impacts will occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☐ ☒

Discussion: The project will conform to applicable local ordinances during both its construction and operation. By conforming to these regulatory and programmatic controls and coordinating with the City of Huntington Beach's emergency service providers, the project will not cause any interference with an emergency response plan or emergency evacuation plan.

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ☐ ☐ ☐ ☒

Discussion: Wildlands can be defined as wholly undisturbed areas where wildlife remains in its natural state. The project site is located in an urban area. The City of Huntington Beach's Fire Department reviews development proposals to ensure that there is adequate staffing, water pressure, and emergency

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

access. Thus, the project will not expose people or structures to a significant risk of loss, injury or death from wildland fires. Therefore, the project will have no impact.

X. NOISE. *Will the project result in:*

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source: 16, 40)	☐	☐	☒	☐

Discussion: Noise is defined as sound that is unwanted, undesirable, or annoying. Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is most commonly characterized by pressure level. Noise measurements are weighted more heavily within the frequencies of maximum human sensitivity; these measurements are written as dBA, or A-weighted decibels.

A noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway.

To the human ear, a sound 10 dBA higher than another is judged to be twice as loud; 20 dBA higher is four times as loud; and so forth. In general, a difference of more than 3 dBA is a perceptible change in environmental noise, while a 5-dBA difference typically causes a change in community reaction, and an increase of 10 dBA is perceived by people as doubling of loudness.

Noise Scales

Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales account for the dependence of the effect of noise on the total acoustical energy content as well as the duration of occurrence. The noise scales that are typically used are the equivalent noise level (L_{eq}), and the community noise equivalent level (CNEL). L_{eq} is a measurement of the acoustic energy content of noise averaged over a specified time period. Thus, the L_{eq} of a time-varying sound and that of a steady sound are the same if they deliver the same amount of energy to the receptor's ear during exposure. CNEL is a 24-hour average L_{eq} that accounts for the sensitivity to noise during evening and nighttime hours. CNEL is calculated by adding 5 dBA to sound levels in the evening (7:00 p.m. to 10:00 p.m.) and adding 10 dBA to sound levels at night (10:00 p.m. to 7:00 a.m.). Another noise metric is the L_{dn}, a 24-hour average L_{eq} that accounts for the sensitivity to noise during nighttime hours. L_{dn} is calculated by adding 10 dBA to sound levels at night (10:00 p.m. to 7:00 a.m.).

Noise Level Standards

The project is located in the City of Huntington Beach. To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the City of Huntington Beach has established standards and ordinances to control noise. The project involves preventive maintenance to the Magnolia Street Bridge over Huntington Beach Channel, and will not increase roadway capacity. Since operation of the project will not change the noise environment pre-existing in the project vicinity, only construction-related noise standards will be discussed here.

Ch. 8.40 of Municipal Code Noise Provisions

The City of Huntington Beach Municipal Code (Code) includes a section designed to control unnecessary, excessive and annoying sounds (Chapter 8.40). The Code's standards apply to any noise sources generated on private property, including continuous and impulsive noise. The City restricts the maximum allowable sound levels generated on residential and commercial land uses during the daytime and nighttime. These levels, when measured at any point on the property line, are shown in **Table X-1** (Exterior Noise Standards for Source Land Uses).

Table X-1: Exterior Noise Standards for Source Land Uses

Type of Land Use	Time Period	Noise Levels (dBA)
Residential Properties	Daytime	55
	Nighttime	50
Professional Office and Public Institutional Properties	Daytime	55
	Nighttime	55
Commercial Properties	Daytime	60
	Nighttime	60
Industrial Properties	Daytime	70
	Nighttime	70

Source: City of Huntington Beach Noise Municipal Code Chapter 8.40.050.

According to the Code, the exterior noise standards in **Table X-1** are prohibited as follows:

- For a cumulative period of more than thirty (30) minutes in any hour;
- Plus 5 dBA for a cumulative period of more than fifteen (15) minutes in any hour;
- Plus 10 dBA for a cumulative period of more than five (5) minutes in any hour;
- Plus 15 dBA for a cumulative period of more than one (1) minute in any hour; or
- Plus 20 dBA for any period of time.

For all construction activities, Huntington Beach prohibits any construction during the hours of 8:00 p.m. to 7:00 a.m. from Monday through Saturday and any time on Sundays or federal holidays.

The Code also states that noise sources associated with "construction, repair, remodeling, or grading" of any "real property" are exempt from the provisions of Chapter 8.40 (Noise Control) of the Code as long as a permit has been obtained from the City of Huntington Beach and the construction activities do not take place between the hours of 8 p.m. and 7 a.m. on weekends and Saturdays, or any time on Sunday or a federal holiday. (According to Treasury Regulations Subchapter A, Section 1.263 A-8(c)(2), one type of real property is defined as "Inherently Permanent Structures," which includes, but is not limited to: roads, bridges, and tunnels.)

Construction of the project may expose persons to or generate noise levels in excess of standards established in the municipal code; however, because the project involves construction and repair of a real property, Chapter 8.40.090 of the Code exempts the proposed construction from the provisions of the Noise Control section of the Code. Operation of the project will not change the pre-existing noise environment in the project vicinity.

Construction (Short-Term Impacts)

Construction of the project may generate short-term and intermittent high noise levels. Construction noise levels will fluctuate depending on construction activity, equipment type and duration of use, and the distance between noise source and receiver. Typical sound emission characteristics of construction equipment are provided in **Table X-2** (Construction Equipment Noise Levels).

Table X-2: Construction Equipment Noise Levels

Equipment Type	Range of Noise Level of Equipment at 50 feet (in dBA)	Suggested Noise Level for Analysis
Dump Truck	81-95	76
Loader	81-90	80
Cement and Mortar Mixer	74-84	79
Forklift	81-86	84
Pneumatic Tools	78-88	85
Air Compressor	76-89	81
Concrete Pump Trailer	74-84	82
Concrete Mixer Truck	69-89	85
Grinder	75-82	82
Tugboat/Barge	N/A	68[a]

a. At 160 feet.

Source:

1. U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971.
2. County of Ventura, Construction Noise Threshold Criteria and Control Measures, May 2002.
3. U.S. Department of Transportation, Federal Highway Administration, FHWA Highway Construction Noise Handbook, FHWA-HEP-06-15. August, 2006.
4. *Dutra Haystack Landing Asphalt and Recycling Facility Draft EIR*, Prepared by Christopher A. Joseph and Associates, Petaluma, CA for County of Sonoma, Santa Rosa, CA. January, 2008.

The project will involve the removal and replacement of unsound concrete, and embankment erosion repair. Each construction phase involves the use of a different mix of construction equipment and therefore, has its own distinct noise characteristics. A schedule of equipment use, matching that used for the air quality analysis, was set up to determine the phase of greatest noise impacts. Microsoft Excel worksheets were used to calculate one-hour noise exposures (L_{eq}) at the nearest sensitive receivers. Given the noise standards in **Table X-1**, construction at the site was determined to have a significant impact if the L_{eq} is greater than 55 dBA during the daytime.

Table X-3 (Noise Exposure from Construction Activities Without Mitigation) shows the noise exposures from construction activities.

Table X-3: Noise Exposure from Construction Activities Without Mitigation

Sensitive Receiver	Distance To Site (feet)	L_{eq} (dBA)	Potential Issue or Potentially Significant Impact?
Nearest Residence	245	70.7	**No**[a]
Most Distant Residence	1,486	55.0	**No**[a]

Source: UltraSystems, 2011.
[a]See text.

Based on the L_{eq} of 70.7 dBA above, impacts from construction activities at the nearest sensitive receiver will be significant without mitigation. In addition, the analysis determined that the sensitive receiver distance within which noise exposure will be significant without mitigation is 1,486 feet. However, because the project involves construction and repair of a real property, Chapter 8.40.090 of the Code exempts the proposed construction from the provisions of the Noise Control section of the Code and subsequently its exterior noise standards. On this basis, impacts from construction activities will be less than significant. However, in the interest of reducing noise levels, the contractor will follow the following mitigation measures.

Mitigation of Construction Noise Impacts

N-1 Keep Equipment Tuned and Use Mufflers

The construction contractor shall ensure that all construction equipment, fixed or mobile, is properly operating (tuned-up) and that mufflers are working adequately.

N-2 Direct Noise Away From Sensitive Receivers

The construction contractor shall ensure that all construction equipment is located so that emitted noise is directed away from sensitive noise receivers.

N-3 Locate Stockpiling and Vehicle Staging Distant From Sensitive Receivers

The construction contractor shall ensure that stockpiling and vehicle-staging areas are located as far as practical from noise-sensitive receivers during construction activities.

N-4 Notify Residences Within 150 Feet of Construction

Two weeks prior to the construction, the construction contractor shall provide notification in writing to adjacent residences if they will be located within 150 feet of the active construction activity.

N-5 Use Temporary Noise Barriers if Necessary

The construction contractor shall, as necessary, provide temporary noise barriers, including sound blankets, between the areas of active construction and sensitive receivers.

Operation (Long-Term Impacts)

Operation of the project will not change the pre-existing noise environment in the project vicinity. Therefore, no impact will occur.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Sources: 41, 42) ☐ ☐ ☒ ☐

Discussion: Vibration is sound radiated through the ground. The rumbling sound caused by vibration is called groundborne noise. The ground motion caused by vibration is measured as peak particle velocity (PPV) in inches per second and is referenced as vibration decibels (VdB). Typical outdoor sources of perceptible groundborne vibration are construction equipment and traffic on rough roads.

The American National Standards Institute (ANSI) indicates that vibration levels in critical care areas, such as hospital surgical rooms and laboratories, should not exceed 0.2 inch per second of PPV. The Federal Transit Administration (FTA) also uses a PPV of 0.2 inch per second as vibration damage threshold for fragile buildings and a PPV of 0.12 inch per second for extremely fragile historic buildings. The FTA criterion for infrequent groundborne vibration events (less than 30 events per day) that may cause annoyance are 80 VdB for residences and buildings where people normally sleep, and 83 VdB for institutional land uses with primarily daytime use.

Construction (Short-Term Impacts)

It is expected that groundborne vibration from project construction activities will cause only intermittent, localized intrusion. The FTA has published standard vibration level and peak particle velocities for construction equipment operations. The calculated root mean square (RMS) velocity levels expressed in VdB and PPV for construction equipment at distances of 25, 50, and 100 feet are listed in **Table X-4** (Vibration Levels of Construction Equipment).

Table X-4: Vibration Levels of Construction Equipment

Equipment	PPV at 25 ft (in/sec)	RMS at 25 ft (VdB)	PPV at 50 ft (in/sec)	RMS at 50 ft (VdB)	PPV at 100 ft (in/sec)	RMS at 100 ft (VdB)
Loaded Truck	0.0760	86	0.0269	77	0.0095	68
Jackhammer	0.0350	79	0.0124	70	0.0044	61
Small Bulldozer	0.0030	58	0.0011	49	0.0004	40

Source:Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment*. May. Ch 12.

As shown in **Table X-4**, the vibration level of construction equipment will be below the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings at a distance of 25 feet from the construction equipment operation. Since no building structures will be located within 25 feet of the construction site, vibration from the project's construction will not cause any structural

damage. Further, since no sensitive receptors are located within 100 feet of the project site, construction of the project will not generate groundborne vibrations that will cause human annoyance either. Therefore, the construction impact will be less than significant.

Operation (Long-Term Impacts)
Operation of the project will not introduce new sources of groundborne vibration. Therefore, no impact will occur due to the project's operation.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Source: 1, 16) ☐ ☐ ☐ ☒

Discussion: As discussed previously, operation of the project will not introduce new stationary and/or mobile noise sources. Therefore, no impacts will occur from the project operation.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Source: 1, 16) ☐ ☐ ☒ ☐

Discussion: As discussed previously, the project will potentially generate high noise levels during the short-term construction activities. However, because the project involves construction and repair of a real property, Chapter 8.40.090 of the Code exempts the proposed construction from the provisions of the Noise Control section of the Code and subsequently its exterior noise standards. Thus, the impact of the project on temporarily increasing ambient noise levels in the vicinity of the project will be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, will the project expose people residing or working in the project area to excessive noise levels? (Source: 1, 5, 16) ☐ ☐ ☐ ☒

Discussion: The project does not include habitable structures and is not located within two miles of a public airport. The nearest airport is the John Wayne Airport, in Santa Ana, which is a public airport about 5.6 miles northeast of the project site. No impacts will occur.

f) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels? (Source: 1, 5, 16) ☐ ☐ ☐ ☒

Discussion: The project is not in the vicinity of a private airstrip; the closest private air strip is the Los Alamitos Army Airfield, which is about 10.9 miles northwest of the project site. No impacts will occur.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

XI. PUBLIC SERVICES. Will the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?	☐	☐	☐	☒
b) Police Protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities or governmental services?	☐	☐	☐	☒

Discussion a) to e): The project will not result in a substantial need for new or substantially altered governmental services in fire protection, police protection, schools, parks and other public facilities or governmental services. The project will not expand the physical capacity of the Magnolia Street Bridge and will not construct any residential housing units to induce residential population growth in the project area. It will enhance public safety and protect the Huntington Beach Channel by performing preventive maintenance activities on an existing bridge. Magnolia Street is an important primary arterial street, and the repair of the bridge will enable nearby emergency response teams to maintain response times in the area. The project will have no adverse impact on public facilities or services.

XII. UTILITIES AND SERVICE SYSTEMS. *Will the project:*

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

Discussion: The project site is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board. During the restoration of missing rock slope protection to its original design and limits, the project will not add additional material to the channel. Additionally, the project does not propose the construction of new housing or businesses, which could otherwise induce population growth. The project will conduct preventive maintenance on an existing bridge, and project operation will not generate additional wastewater that could exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board.

b) Require or result in the construction of new water or wastewater treatment facilities or	☐	☐	☐	☒

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

expansion of existing facilities, the construction of which could cause significant environmental effects?

Discussion: As previously discussed in XII a), the project will not induce population growth and will not generate additional wastewater that will otherwise require construction of additional wastewater treatment facilities or expansion of existing facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? ☐ ☐ ☐ ☒

Discussion: The project will not create significant additional impermeable surfaces that will otherwise require additional storm water drainage facilities. Any storm water generated within the project area will drain into existing facilities. Therefore, the project will not require the construction or expansion of storm water drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? ☐ ☐ ☐ ☒

Discussion: As previously discussed in XII a), the project will not induce population growth, which may otherwise require additional water supplies. The project is adequately served by existing entitlements, and will not require new or expanded entitlements for water supplies.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ☐ ☐ ☐ ☒

Discussion: As previously discussed in XII a), the project will not induce population growth, which may otherwise require additional wastewater treatment providers. The City of Huntington Beach is served by two wastewater treatment plants, whose current operating capacity exceeds existing operations, and engineering plans for plant improvements are anticipated to meet future increased demands.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid ☐ ☐ ☒ ☐

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

waste disposal needs? (Sources: 43)

Discussion: Solid waste generated within the City of Huntington Beach is transported to the Frank R. Bowerman Landfill in the City of Irvine. As of 2000, the remaining estimated capacity is 59,411,872 cubic yards, and the landfill is anticipated to close in 2022. The project will not result in an increase of solid waste production during its operational phase. Generation of solid waste during the construction phase will be short-term in nature, and will be accommodated by existing landfills with sufficient capacity. Therefore, any impacts will be less than significant.

g) Comply with federal, state, and local statutes and regulations related to solid waste? ☐ ☐ ☒ ☐

Discussion: The project will comply with federal, state and local statutes and regulations related to solid waste. Solid waste will occur over a short-period of time due to construction activities, but will be regulated so as to ensure a less than significant impact.

h) Include a new or retrofitted storm water treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands?) ☐ ☐ ☐ ☒

Discussion: Since the project will not create significant additional impervious surfaces that will otherwise require new or retrofitted storm water control, it will not require new or expanded existing storm water treatment facilities.

XIII. AESTHETICS. *Will the project:*

a) Have a substantial adverse effect on a scenic vista? (Source: 1) ☐ ☐ ☒ ☐

Discussion: Visual resources in the vicinity of the project site include the Pacific Ocean and the Huntington Beach Wetlands. According to the City's General Plan, Pacific Coast Highway is classified as a major urban scenic corridor, and Magnolia Street as a landscape corridor. Implementation of the project will result in maintenance activities on an existing bridge, restoring the bridge to its original design condition, and will not alter the size or bulk of the bridge. Therefore, less than significant impacts would occur to the scenic vista in the project vicinity.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Source: 44) ☐ ☐ ☐ ☒

Discussion: According to the Caltrans' Scenic Highway Program, the project site is not located within a California scenic highway. The bridge is located in an urban setting. Therefore, the project will not damage scenic resources, including trees, rock outcroppings, and historic buildings

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

within a state scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Source: 1, 5) ☐ ☐ ☒ ☐

Discussion: The project site is located on an existing four-lane bridge within an urban environment on Magnolia Street. The project vicinity has two distinct visual characters to the north and to the south of the site. The area north of the Huntington Channel is largely marked by residential development. South of Huntington Channel is the vast expanses of the Huntington Wetlands, which has a natural open space setting.

The project will restore the existing bridge to its original design condition. It will not change the size or location of the bridge, and the aesthetics of the surroundings will essentially remain the same. The project will not substantially degrade the aesthetic quality of the Huntington Beach Wetlands. Therefore, the project will result in a less than significant impact on the existing visual character of the site and its surroundings. Additionally, impacts occurring during construction that may degrade the existing visual character or quality of the site will be less than significant.

d) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area? (Source: 5) ☐ ☐ ☐ ☒

Discussion: The project will conduct preventive maintenance on an existing bridge, and will not create new sources of light or glare that will adversely affect day or nighttime views in the area. No impacts will occur.

XIV. CULTURAL RESOURCES. *Will the project:*

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (Sources: 45, 46) ☐ ☐ ☐ ☒

Discussion: The National Register of Historic Places was reviewed, and no historic places are located within a half mile of the Magnolia Street Bridge. The listing of California Historic Landmarks was also reviewed, and no historic landmarks are located within a half mile of the Magnolia Street Bridge. Therefore, no impact to known historic resources will occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Sources: 45, 46). ☐ ☒ ☐ ☐

Discussion: Six cultural resources inventory surveys have been conducted on lands encompassing the Magnolia Street Bridge project site or within approximately 500 feet of it. No prehistoric or historic archaeological sites have been located adjacent to or in the immediate vicinity of the

project area.

There are no prehistoric archaeological sites within a half-mile radius of the project site. One historic site, 30-276946, has been recorded (Daley 2009). This consists of three fuel storage tanks built in 1961 for the adjacent AES Huntington Beach Generating Station. One prehistoric archaeological site, CA-ORA-149, is located approximately one mile to the northwest, outside the Area of Potential Effects. CA-ORA-149 is a medium size shell midden with burials. This prehistoric site is on the Huntington Mesa and approximately 1.5 miles from the project location. There is little potential for discovery of further cultural resources during construction within the project area. Implementation of mitigation measure **CU-1** will reduce potential impacts to less than significant levels.

CU-1: Archaeological Monitoring

If unexpected archaeological features are discovered during ground-disturbing construction work, a qualified archaeologist will be retained to investigate and report such findings to the City if deemed necessary. If the archaeological resources are found to be significant, the archaeologist will determine appropriate actions, in cooperation with the City, for exploration and/or salvage. These actions, as well as final disposition of the resources, will be subject to the approval of the City.

c)	Directly or indirectly destroy a unique paleontological resource or site unique geologic feature? (Sources: 45, 46).	☐	☐	☐	☒

Discussion: The soils underneath the Magnolia Street Bridge are recent alluvial fill into the Santa Ana River floodplain mouth, which in turn are underlain by Topanga Formation soils. There is little potential for paleontological resources to be present. There is the possibility for paleontological resources to be uncovered if there is deep excavation (five feet or deeper) of the project area. However, since deep excavation is not planned for this project, no impacts are expected to occur.

d)	Disturb any human remains, including those interred outside of formal cemeteries? (Sources: 45, 46)	☐	☒	☐	☐

Discussion: Archaeological investigations within a half-mile radius of the Magnolia Street Bridge project site have not uncovered human remains. However, one prehistoric archaeological site (CA-ORA-149) on the edge of Huntington Mesa, less than 1.5 miles northwest of the project, did contain several sets of human remains There is a low probability for discovery of human remains during construction within the project area given the low potential for redeposition of remains off the bluff into the floodplain below. With the incorporation of mitigation measure **CU-2**, this impact will be reduced to less than significant.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

CU-2: Notify County Coroner of Human Remains

In accordance with Public Resources Code §5097.94, if human remains are found, the Orange County Coroner must be notified within 24 hours of the discovery. If the Coroner determines that the remains are not recent, the Coroner will notify the Native American Heritage Commission in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the City of Huntington Beach the disposition of the human remains.

XV. RECREATION. *Will the project:*

a) Will the project increase the use of existing neighborhood, community and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? (Source: 5)	☐	☐	☐	☒

Discussion: The project will perform preventive maintenance on an existing bridge, which will not result in an increased use of existing neighborhood and regional parks, and other recreational facilities. Therefore, the project will have no impact on the physical deterioration of any recreational facilities.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Source: 5)	☐	☐	☐	☒

Discussion: The project will perform preventive maintenance on an existing bridge, which will not include recreational facilities or require the construction or expansion of existing recreational facilities. Therefore, the project will have no impact regarding recreational facilities.

c) Affect existing recreational opportunities? (Source: 5)	☐	☐	☒	☐

Discussion: The project will perform preventive maintenance on an existing bridge, which will not include recreational facilities or require the expansion of existing recreational facilities. Therefore, the project will have no direct impact on existing recreational facilities. The bridge includes a sidewalk and bike lane, which are part of the circulation network that provides access to Huntington Beach State Park on the seaward side of PCH. Therefore, repair of the bridge is essential in maintaining long term coastal access via Magnolia Street. During construction, the existing bike lane will be restricted but a temporary bike lane adjacent to the existing lane will be available. In sum, pedestrian and bicycle access will be maintained at all times. Therefore, there will be less than significant impact on existing recreational opportunities.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

XVI. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. *Will the project:*

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Sources: 1, 2, 47) ☐ ☐ ☐ ☒

Discussion: The Orange County Important Farmland 2010 Map, produced by the California Resources Agency, identifies the project site as "Urban and Built-Up Land." The project site is not designated prime farmland, unique farmland, or farmland of statewide importance. Therefore, implementation of the project will have no impact on farmlands, and will not have the potential to convert any farmland to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Source: 1, 47) ☐ ☐ ☐ ☒

Discussion: The existing zoning for the adjacent land uses from the project site includes Coastal Conservation, Public-Semipublic, and Residential Low Density. The Huntington Beach Wetlands are located south of and adjacent to the project site. Therefore, the project will not conflict with existing zoning for agricultural use, and no adverse impacts to agricultural resources will occur as a result of the project. Williamson Act contracts are contracts with counties and cities to restrict land use to agricultural and compatible open space uses to discourage conversion to urban uses. Due to the zoning of the project area, it is evident that the city is not restricting this land for agricultural purposes, so no conflict with a Williamson Act contract will occur.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? (Sources: 1, 47) ☐ ☐ ☐ ☒

Discussion: As previously discussed in the above responses, the project site is not located within an area designated for agricultural uses. The project will conduct preventive maintenance on an existing bridge, and will not result in the cumulative loss of farmland to non-agricultural use.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. GREENHOUSE GAS EMISSIONS. *Will the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Sources: 48, 49, 50, 51, 52, 13, 14)	☐	☐	☒	☐

Discussion: California has been in the forefront in developing legislation and regulations aimed at reducing GHG emissions. The following is a brief summary of the developments over the past few years.

Executive Order #S-3-05, signed by Governor Arnold Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80% reduction in GHG emissions to below 1990 levels by 2050.

The California Global Warming Solutions Act of 2006 (AB 32). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.), into law. AB 32 was intended to effectively end the scientific debate in California over the existence and consequences of global warming. In general, AB 32 directs the California Air Resources Board (CARB) to do the following:

- On or before June 30, 2007, publicly make available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit;
- By January 1, 2008, determine the statewide levels of GHG emissions in 1990, and adopt a statewide GHG emissions limit that is equivalent to the 1990 level (an approximately 25% reduction in existing statewide GHG emissions);
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources as CARB finds necessary to achieve the statewide GHG emissions limit; and
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

On December 11, 2008, the CARB approved the *Climate Change Scoping Plan* pursuant to AB 32. The Scoping Plan recommends a wide range of measures for reducing GHG emissions, including (but not limited to):

- Expanding and strengthening of existing energy efficiency programs;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a GHG emissions cap-and-trade program;
- Establishing targets for transportation-related GHG emissions for regions throughout the state, and pursuing policies and incentives to meet those targets;
- Implementing existing state laws and policies, including California's clean car standards, goods movement measures and the Low Carbon Fuel Standard; and
- Targeted fees to fund the state's long-term commitment to administering AB 32.

Executive Order S-01-07 (Low Carbon Fuel Standard). Executive Order #S-01-07 (January 18, 2007) establishes a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10% by 2020 through establishment of a Low Carbon Fuel Standard. Carbon intensity is the amount of CO_2e (CO_2 equivalent) per unit of fuel energy emitted from each stage of producing, transporting and using the fuel in a motor vehicle. On April 23, 2009 the Air Resources Board adopted a regulation to implement the standard.

Senate Bill 97. Senate Bill 97 was signed by the governor on August 24, 2007. The bill required the Office of Planning and Research (OPR), by July 1, 2009, to prepare, develop and transmit to the resources agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. On April 13, 2009 OPR submitted to the Secretary for Natural Resources its proposed amendments to the *State CEQA Guidelines* for greenhouse gas emissions. The Resources Agency adopted those guidelines on December 30, 2009, and they became effective on March 18, 2010. The amendments treat GHG emissions as a separate category of impacts (i.e., they are not to be addressed as part of an analysis of air quality impacts.)

Section 15064.4, which was added to the CEQA Guidelines, specifies how the significance of impacts from GHGs is to be determined. First, the lead agency should "make a good faith effort" to describe, calculate or estimate the amount of GHG emissions resulting from a project. After that, the lead agency should consider the following factors when assessing the impacts of the GHG emissions on the environment:

- The extent to which the project may increase or reduce GHG emissions, relative to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of GHG emissions.

The Governor's Office of Planning and Research (OPR) asked the CARB to make recommendations for GHG-related thresholds of significance. On October 24, 2008, the CARB issued a preliminary draft staff proposal for *Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act.* After holding two public workshops and receiving comments on the proposal, CARB staff decided not to proceed with threshold development. Quantitative significance thresholds, if any, are to be set by local agencies.

Senate Bill 375. Senate Bill 375 requires coordination of land use and transportation planning to reduce GHG emissions from transportation sources. Regional transportation plans, which are developed by metropolitan transportation organizations such as the Southern California Association of Governments (SCAG), are to include "sustainable community strategies" to reduce GHG emissions.

Title 24. The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the *California Code of Regulations*) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Compliance with Title 24 will result in decreases in GHG emissions. The California Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards on April 23, 2008 with an aim to promote the objectives listed below.

- Provide California with an adequate, reasonably-priced and environmentally-sound supply of energy.

- Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020.

- Pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs.

- Act on the findings of California's Integrated Energy Policy Report (IEPR) that Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing greenhouse gas emissions.

- Meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes.

- Meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction and installation of certain systems; equipment and building components that are installed in buildings.

The SCAQMD has prepared a Draft Guidance Document entitled *Interim CEQA Greenhouse Gas Significance Thresholds* (October 2008) for evaluating operational and construction impacts of proposed industrial projects, and has adopted an interim threshold of 10,000 tonnes of CO_2-equivalent per year. (One tonne, or "metric ton," is equivalent to 1,000 kilograms.) Per SCAQMD guidance, construction emissions should be amortized over the economic life of the project, which is proposed at 30 years.

Construction GHG emissions for CO_2, CH_4, and N_2O, and total carbon dioxide equivalent (CO_2e) were determined using CalEEMod. Operation of the project will not generate new stationary or mobile sources of emissions; therefore, operational GHG emissions were not included in the analysis.

The project will generate approximately 161 tonnes of CO_2e over the construction period. Amortized over 30 years, construction will generate approximately 5.4 tonnes of CO_2e emissions annually over the life of the project. Therefore, the project will generate less than the SCAQMD interim threshold of 10,000 tonnes of CO_2e, and will have a less than significant impact on the environment.

b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (Source: 48)	☐	☐	☒	☐

Discussion: Currently, statewide GHG emissions are regulated through AB 32, which requires that the State's GHG emissions be reduced to 1990 levels by 2020. As discussed in **Section XVII a**, the project is well below the SCAQMD interim threshold and therefore will not conflict with any local or state targets for GHG emission reductions. The project will not conflict with plans to meet the goals of AB32; therefore, the project will have a less than significant impact.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Source: 1, 5, 20, 21, 26) ☐ ☒ ☐ ☐

Discussion: The project has the potential to affect jurisdictional waterways, sensitive natural communities, and special-status species. Implementation of the project design features and mitigation measures will bring these effects to a less than significant level, as described in Section VII.

Implementation of the project, with incorporation of proposed mitigation measures and project design features, will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) ☐ ☒ ☐ ☐

(Source: 1, 5, 53, 54)

Discussion: The proposed project does not have any individually significant impacts that cannot be mitigated, and would not add cumulatively to any impacts by other surrounding projects. Considered individually with mitigation, the project will result in less than significant impacts in the areas of biological resources and noise (construction-related). Thus, the project's incremental effects are not cumulatively considerable.

Currently, two projects are located within the immediate vicinity of the project. They include the Poseidon Desalination Plant and the Ascon Landfill Site. The Poseidon Desalination Plant, located at 21730 Newland Street off the Pacific Coast Highway, is directly adjacent to the project site and less than 0.5 mile northwest of the project site. The Poseidon Seawater Desalination Project

involves the construction and operation of a 56,000-acre-foot per year seawater desalination facility to provide a supplemental and alternative source of potable water to Orange County. The facility will consist of seawater intake pretreatment facilities, a seawater desalination plant using reverse osmosis technology, product water storage, two pump stations, landscaping, chemical storage, material storage tanks, and a 42- to 48-inch diameter product water transmission pipeline possibly up to 10 miles long in Huntington Beach and Costa Mesa. An EIR has been certified for this project.

The second concurrent project is the Ascon Landfill Site. This 38-acre property is located at the southwest corner of Magnolia Street and Hamilton Avenue, approximately 0.6 mile north of the project site. The property was utilized as a licensed landfill from the 1930s to the early 1980s and is currently being monitored and being prepared for remediation under the oversight of the California Department of Toxic Substances Control (DTSC). Though the Ascon Landfill Site poses no immediate health risk to the public, DTSC requires that an overall cleanup plan be developed and implemented for the landfill site to ensure long-term public health and safety. A draft environmental impact report (DEIR) was available for public review through October 14, 2013 which was prepared for the proposed cleanup and final remediation activities currently being planned for the landfill site.

Given the nature of the Magnolia Street Bridge project with its preventive maintenance measures and purpose to repair and rehabilitate an existing deteriorated bridge, it is unlikely that, when viewed in connection with nearby concurrent projects, the project will have cumulatively considerable incremental effects. Any minor short-term impacts related to construction of the project will be less than significant or reduced to below a level of significance with mitigation measures incorporated. The project and other concurrent projects will also have different construction schedules and minimum overlap. In comparison to the Desalination Plant and Ascon Landfill Site projects, the project is small in scope and scale. Construction is expected to last approximately six months at the Magnolia Street Bridge. Any potential impacts will remain localized. Moreover, the project will not result in significant cumulative impacts with implementation of the project design features and mitigation measures recommended in this document. All potential impacts of the project have been identified and mitigation measures have been prescribed, where applicable, to reduce potential impacts to less than significant levels.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Source: 5)	☐	☐	☒	☐

Discussion: The project will conduct preventive maintenance on an existing bridge to restore its original design. As described in this environmental assessment, construction and operation of project will not cause substantial adverse effects on human beings, either directly or indirectly. Potential impacts to humans will be reduced to below a level of significance by mitigation measures included in this project (see Attachment No. 2, Summary of Mitigation Measures).

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XIX. EARLIER ANALYSIS/SOURCE LIST.

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). Earlier documents prepared and utilized in this analysis, as well as sources of information are as follows:

Earlier Documents Prepared and Utilized in this Analysis:

Reference #	Document Title	Available for Review at:
1	City of Huntington Beach General Plan	City of Huntington Beach Planning and Building Dept. 2000 Main Street Huntington Beach and at http://www.huntingtonbeachca.gov/Government/Departments/Planning/gp/index.cfm
2	City of Huntington Beach Zoning and Subdivision Ordinance	City of Huntington Beach City Clerk's Office, 2000 Main St., Huntington Beach and at http://www.huntingtonbeachca.gov/government/elected_officials/city_clerk/zoning_code/index.cfm
3	Local Coastal Program	City of Huntington Beach City Clerk's Office, 2000 Main St., Huntington Beach and at http://www.huntingtonbeachca.gov/files/users/planning/Coastal_Elem_Tech_Synop.pdf
4	Natural Community Conservation Planning (NCCP)	http://www.dfg.ca.gov/habcon/nccp/status/
5	Site Plans	See Attachment #1
6	Earthquake Fault Zones	http://www.consrv.ca.gov/CGS/rghm/ap/Pages/index.aspx
7	Significant Earthquakes and Faults	http://www.data.scec.org/significant/fault-index.html
8	Seismic Hazards Zonation Program	http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx
9	City of Huntington Beach Geotechnical Inputs Report	City of Huntington Beach 2000 Main Street, Huntington Beach
10	FEMA Flood Insurance Rate Map	http://gis1.msc.fema.gov/Website/newstore/viewer.htm
11	CalEEMod User's Guide Version 2011.1.	South Coast Air Quality Management District (SCAQMD), http://www.aqmd.gov/caleemod/guide.htm
12	Port of Long Beach Air Emissions Inventory – 2005	http://www.polb.com/civica/filebank/blobdload.asp?BlobID=4414
13	CEQA Air Quality Handbook South Coast Air Quality Management District (1993)	South Coast Air Quality Management District (SCAQMD)

Reference #	Document Title	Available for Review at:
14	Criteria Air Pollutant and Greenhouse Gas Emissions Modeling Output	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
15	Final Localized Significance Threshold Methodology	South Coast Air Quality Management District (SCAQMD) http://www.aqmd.gov/ceqa/handbook/lst/lst.html
16	City of Huntington Beach Municipal Code	City of Huntington Beach City Clerk's Office, 2000 Main St., Huntington Beach and at http://www.huntingtonbeachca.gov/government/charter_codes/municipal_code.cfm
17	Regional Transportation Plan.	Southern California Association of Governments (SCAG), http://rtpscs.scag.ca.gov/Pages/default.aspx
18	Congestion Management Program	http://www.octa.net/pdf/2011-CMP.pdf
19	Airport Environs Land Use Plan for John Wayne Airport (Apr. 17, 2008)	Airport Land Use Commission Document available only upon request http://www.ocair.com/commissions/aluc/
20	California Natural Diversity Database, Biogeographic Information Observation System	http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp
21	Email from Marilyn Fluharty, California Department of Fish and Game, San Diego, California to Michelle Tollett February 27, 2013	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
22	Preliminary Jurisdictional Delineation Form	Appendix F of the Natural Environment Study (NES) for the Magnolia Street Bridge Maintenance Project
23	Essential Fish Habitat Mapper	http://www.habitat.noaa.gov/protection/efh/habitatmapper.html
24	California Department of Fish and Wildlife, Biogeographic Information Observation System	http://imaps.dfg.ca.gov/viewers/biospublic/app.asp?zoomtoBookmark=2335
25	Personal Communication between Michelle Tollett (UltraSystems Sr. Biologist) and Matt Chirdon (CDFW)	California Department of Fish and Wildlife (714) 840-1959
26	1987 Wetland Delineation Manual	United States Army Corps of Engineers
27	Draft Natural Environment Study for Magnolia Street Bridge Preventive Maintenance	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
28	E-mail from Bryant Chesney (NOAA Marine Fisheries) to Charles Baker (Caltrans) April 10, 2012	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
29	Personal communication between Christine Whitcraft and Sarah Yazouri and Michelle	City of Huntington Beach Planning and Building Department

Reference #	Document Title	Available for Review at:
	Tollett	2000 Main Street Huntington Beach, CA 92648
30	Southern California Eelgrass Mitigation Policy (Adopted July 31, 1991)	http://swr.nmfs.noaa.gov/hcd/policies/EELPOLrev11_final.pdf
31	California Fish and Game Code Commission Policies, Wetlands	http://www.fgc.ca.gov/policy/p4misc.aspx#WETLANDS
32	CalFlora	http://www.calflora.org/
33	Personal communication between Gordon Smith and Michelle Tollett	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
34	Personal communication between Richard Zembal and Michelle Tollett	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
35	Migratory Bird Treaty Act of 1918	http://www.fws.gov/laws/lawsdigest/migtrea.html
36	Endangered Species Act of 1973	http://www.fws.gov/laws/lawsdigest/esact.html
37	Information Planning and Conservation System	http://ecos.fws.gov/ipac/
38	California Code Of Regulations Title 14.- Natural Resources	http://www.dfg.ca.gov/habcon/cesa/incidental/CodeRegT14_783.pdf
39	EnviroStor	http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=30490018
40	Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety	http://www.nonoise.org/library/levels74/levels74.htm
41	Guide to the Evaluation of Human Exposure to Vibration in Buildings	American National Standards Institute (ANSI)
42	Transit Noise and Vibration Impact Assessment	http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf
43	California Department of Resources Recycling and Recovery Data Central	http://www.calrecycle.ca.gov/
44	Eligible and Officially Designated Routes	http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm
45	National Register of Historic Places	http://www.nps.gov/nr/research/
46	California Office of Historic Preservation (OHP). Historic Landmarks, Orange County, CA	http://ohp.parks.ca.gov/?page_id=21445
47	Farmland Mapping and Monitoring Program	http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx
48	Climate Change Scoping Plan, a Framework for Change, Pursuant to AB32, the California	California Air Resources Board (CARB) http://www.arb.ca.gov/cc/scopingplan/document/scopin

Reference #	Document Title	Available for Review at:
	Global Warming Solutions Act of 2006	gplandocument.htm
49	Preliminary Draft Staff Proposal. Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act	California Air Resources Board (CARB) http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf
50	Personal communication from Douglas Ito, California Air Resources Board, Sacramento, California, to Michael Rogozen, UltraSystems Environmental, Inc.	City of Huntington Beach Planning and Building Department 2000 Main Street Huntington Beach, CA 92648
51	2008 Building Energy Efficiency Standards	http://www.energy.ca.gov/title24/2008standards/index.html
52	2008 Building Energy Efficiency Standards for Residential and Nonresidential Buildings	California Energy Commission
53	City of Huntington Beach Major Projects	http://www.huntingtonbeachca.gov/government/departments/planning/major/
54	Poseidon Desalination Plant DEIR	http://www.huntingtonbeachca.gov/government/departments/planning/major/poseidon.cfm
55	Final 2012 Air Quality Management Plan	http://www.aqmd.gov/aqmp/2012aqmp/Final/index.html
56	Preliminary Environmental Study	Signed and approved in October 2012

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS
MAGNOLIA STREET BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
BRIDGE No. 55C-0388
BPMPL-5181 (171)
C.C. No. 1356

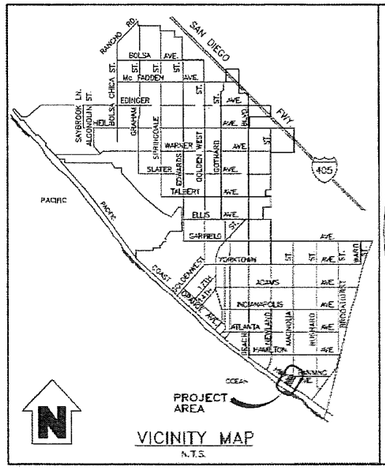
APPROVED: _____ _____
TRAVIS K. HOPKINS, P.E. DATE
DIRECTOR OF PUBLIC WORKS

GENERAL NOTES:

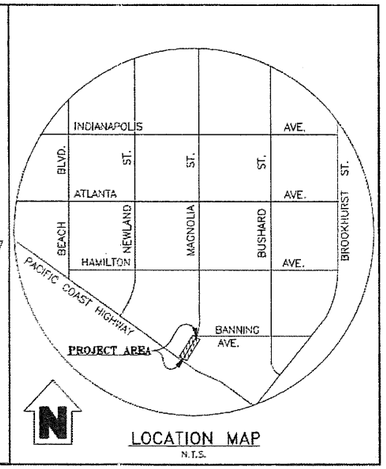
1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE BASED ON A SEARCH OF THE AVAILABLE RECORDS. UTILITY SURFACE FEATURES ARE BASED ON FIELD OBSERVATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, SHOWN OR NOT SHOWN ON THESE PLANS.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST COMPLETE AND SUBMIT TO THE AGENCY THE UNDERGROUND SERVICE ALERT IDENTIFICATION FORM WHICH HAS BEEN PROVIDED IN THE PROJECT SPECIFICATIONS.
3. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AGENCY'S STANDARD PLANS, PROJECT PLANS, SPECIFICATIONS, AND CONTRACT DOCUMENTS. THE CONTRACTOR SHALL KEEP A COPY OF THIS INFORMATION ON THE JOB SITE.
4. A PRE-CONSTRUCTION MEETING SHALL BE HELD A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCING OF WORK.
5. THE CONTRACTOR SHALL NOTIFY THE AGENCY'S CONSTRUCTION MANAGER, ERIC CHARLONNE, @ (714) 536-5430, A MINIMUM OF 5 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AND 48 HOURS IN ADVANCE FOR PROJECT INSPECTION. SURVEY STAKING SHALL BE PROVIDED BY THE CONTRACTOR.
6. PROJECT STATIONING REFERS TO THE CENTERLINE OF STREET.
7. STOCKPILING OF REMOVAL MATERIAL WILL NOT BE ALLOWED IN OR AROUND THE PROJECT SITE OR PUBLIC RIGHT OF WAY.
8. DOORKNOB NOTIFICATION OF RESIDENTS AND BUSINESS OWNERS DIRECTLY AFFECTED BY CONSTRUCTION AND THE POSTING OF "NO PARKING" NOTIFICATION SIGNS SHALL OCCUR A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
9. PUBLIC AND/OR PRIVATE IMPROVEMENTS TO BE PROTECTED IN PLACE ARE NOT LIMITED TO THOSE SPECIFICALLY CALLED OUT ON THE PLANS. ALL EXISTING IMPROVEMENTS WHICH ARE NOT IDENTIFIED FOR REMOVAL AND/OR RECONSTRUCTION ON THE PLANS AND/OR SPECIFICATIONS SHALL BE PROTECTED IN PLACE AT THE CONTRACTOR'S EXPENSE PER SECTION 7-9 OF THE SPECIFICATIONS.
10. PRIOR TO THE END OF EACH WORKING DAY, THE CONTRACTOR SHALL CONSTRUCT THE A.C. BASE COURSE SECTION REQUIRED WITHIN EACH AREA OF PAVEMENT EXCAVATED DURING THAT WORKING DAY, UNLESS OTHERWISE PERMITTED BY THE CITY ENGINEER. TRAVEL LANES SHALL BE OPEN TO TRAFFIC AT THE END OF EACH WORKING DAY PER SECTION 5-7.2 AND 7-10.3 OF THE SPECIFICATIONS.

NPDES GENERAL NOTES:

1. SEDIMENT FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING STRUCTURAL CONTROLS AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.
2. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.
3. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTY BY WIND OR RUNOFF AS REQUIRED BY THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.
4. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITES AND MUST NOT BE DISCHARGED TO RECEIVING WATERS OR TO THE LOCAL STORM DRAIN SYSTEM.
5. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.
6. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
7. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIALS OTHER THAN STORMWATER (NON-STORMWATER DISCHARGES) ARE PROHIBITED EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT OR THE STATEWIDE GENERAL CONSTRUCTION STORMWATER PERMIT.
8. POTENTIAL POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS, WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDE, HERBICIDE, FERTILIZERS, WOOD PRESERVATIVES AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE, AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE / EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHINGS AND TESTING.
9. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED, TEMPORARY AREA ON-SITE AND PHYSICALLY SEPARATED FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
10. DISCHARGING CONTAMINATED GROUNDWATER, PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER, PRODUCED BY DEWATERING ACTIVITIES REQUIRES A NATIONAL POLLUTANTS DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
11. NOTICE: ALL CONTRACTORS AND CONSTRUCTION PERSONNEL SHALL MEET THE REGULATORY CONSTRUCTION REQUIREMENTS ON THE PROJECT SITE, AS SHOWN IN THE LATEST EDITION OF THE ORANGE COUNTY STORMWATER PROGRAM "CONSTRUCTION RUNOFF GUIDANCE MANUAL."



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

BID ITEM		QUANTITY	
1.	MOBILIZATION	1	LS
2.	PREPARE STORM WATER POLLUTION PREVENTION PLAN	1	LS
3.	WATER POLLUTION CONTROL	1	LS
4.	WETLANDS LANDSCAPE REPAIR	1	LS
5.	TRAFFIC CONTROL SYSTEM	1	LS
6.	REMOVE ASPHALT CONCRETE PAVEMENT	7518	SF
7.	PREPARE CONCRETE BRIDGE DECK SURFACE	7518	SF
8.	BRIDGE REMOVAL (PORTION)	1	LS
9.	STRUCTURE EXCAVATION (RETAINING WALL)	2	CY
10.	STRUCTURE BACKFILL (RETAINING WALL)	2	CY
11.	HOT MIX ASPHALT (TYPE A)	80	TON
12.	REPLACE CONCRETE PAVEMENT	1	LS
13.	STRUCTURAL CONCRETE (RETAINING WALL)	7	CY
14.	PORTLAND CEMENT CONCRETE (PATCH)	280	CF
15.	FURNISH POLYESTER CONCRETE OVERLAY	1253	CF
16.	PLACE POLYESTER CONCRETE OVERLAY	7518	SF
17.	BAR REINFORCING STEEL (RETAINING WALL)	688	LB
18.	ROCK SLOPE PROTECTION (1/4 TON, METHOD B)	95	CY
19.	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	142	SY
20.	CONCRETE BARRIER (TYPE 26 MODIFIED)	179	LF
21.	CHAIN LINK RAILING (TYPE 7 MODIFIED)	287	LF

SHEET INDEX

SHEET NO.	DRAWING NO.	DESCRIPTION
1	T1	TITLE SHEET
2	T2	SITE PLAN
3	TC1	TRAFFIC CONTROL PLAN 1
4	TC2	TRAFFIC CONTROL PLAN 2
5	TC3	TRAFFIC CONTROL PLAN 3
6	TC4	TRAFFIC CONTROL PLAN 4
7	S1	GENERAL PLAN
8	S2	FOUNDATION PLAN
9	S3	SUBSTRUCTURE REPAIR SEQUENCE

NOTICE TO THE CONTRACTOR

CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE C.C. No. 1356

Underground Service Alert
Call: 811
TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

REV.	DATE	BY	DESCRIPTION	APPVD

REFERENCES

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA

DRAWN BY:	BM	05/15/12
DESIGNED BY:	RBS	05/15/12
CHECKED BY:		

PREPARED UNDER THE SUPERVISION OF:
Michael A. Thomas PRINCIPAL S.E. DATE
S.E. NO.: S4676 EXP. DATE: 08/30/13
APPROVED BY:
M. Todd Brousseau PRINCIPAL C.E. DATE
R.C.E. NO.: 65744 EXP. DATE: 12/31/13

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. THOMAS No. S4676 Exp. 8/30/13 STATE OF CALIFORNIA

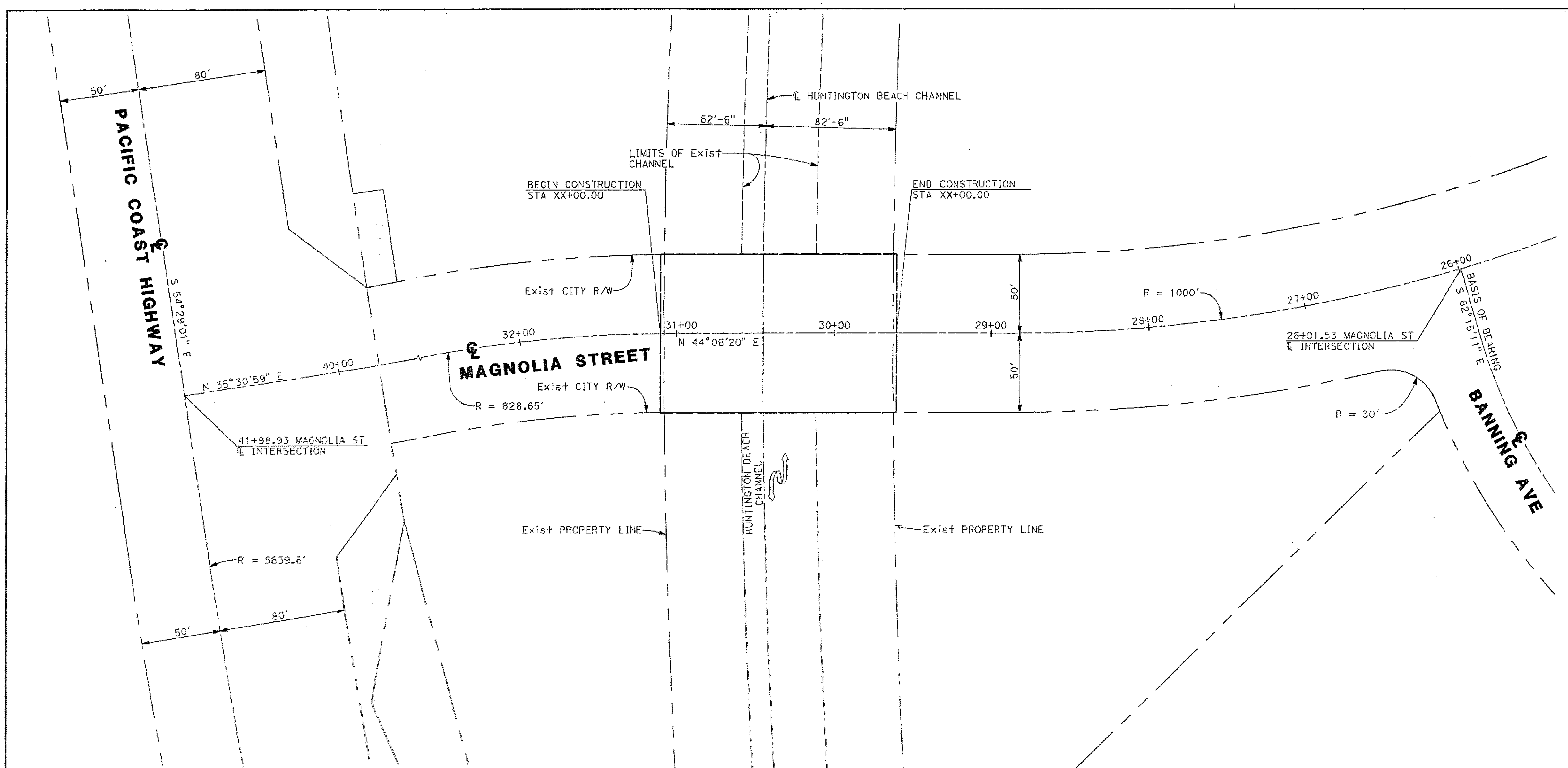
CITY ENGINEER:
Antonio Ornelas, P.E. DATE
R.C.E. NO.: C58814 EXP. DATE: 06/30/13
CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

TITLE SHEET
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. XX+00.00 TO STA. XX+00.00

SHEET NO. 1 OF 9
T1

(2012211CT_T1) 2012211

ATTACHMENT NO. 1-1



PLAN
1" = 30'

BENCHMARKS AND BASIS OF BEARINGS:

HORIZONTAL CONTROL:

THE HORIZONTAL COORDINATES OF THIS SURVEY ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, 1983 NAD, (1991.35 EPOCH OCS GPS ADJUSTMENTS).

THE BEARING N62°15'11"W OF THE MONUMENT LINE, BETWEEN FOUND MONUMENTS, FROM MAGNOLIA STREET TO BANNING AVENUE, AS SHOWN ON THAT CERTAIN RECORD OF SURVEY 2005-1075 IN THE CITY OF HUNTINGTON BEACH, COUNTY OF ORANGE, STATE OF CALIFORNIA, FILED FOR RECORD ON DECEMBER 23, 2008, IN BOOK 232 OF RECORD OF SURVEYS AT PAGES 1 THROUGH 10 INCLUSIVE, RECORDS OF ORANGE COUNTY, WAS TAKEN AS THE BASIS OF BEARINGS FOR THIS SURVEY.

VERTICAL CONTROL

BENCHMARK: 1G-150-74

FOUND ORANGE COUNTY PUBLIC WORKS 3 ¾" OCS ALUMINUM BENCHMARK DISK IN THE TOP OF A CONCRETE ABUTMENT. MONUMENT IS LOCATED IN THE SOUTHEAST CORNER OF THE INTERSECTION OF MAGNOLIA AVENUE AND A FLOOD CONTROL CHANNEL 45 FEET NORTHEASTERLY OF MAGNOLIA AVENUE AND 0.2 MILES NORTHEASTERLY ALONG MAGNOLIA AVENUE FROM ITS INTERSECTION WITH PACIFIC COAST HIGHWAY. DISK IS STAMPED "1G-150-74".

ELEVATION = 13.553 FEET (NAVD 88)

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE

C.C. No. 1356

Underground Service Alert
Call: 811
TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

REV.	DATE	BY	DESCRIPTION	APP'VD

REFERENCES

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
BCA

DRAWN BY:	DW	05/15/12
DESIGNED BY:	RMS	05/15/12
CHECKED BY:		

PREPARED UNDER THE SUPERVISION OF:
Michael A. Thomas PRINCIPAL S.E. DATE
R.S.E. NO. 54876 EXP. DATE 9/30/12
APPROVED BY:
W. Todd Broussard PRINCIPAL C.E. DATE
R.C.E. NO. C57144 EXP. DATE 12/31/13

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. THOMAS No. S4876 Exp. 9/30/12 STRUCTURAL STATE OF CALIFORNIA

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

SITE PLAN
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. XX+00.00 TO STA. XX+00.00

SHEET NO. 2 OF 9
T2

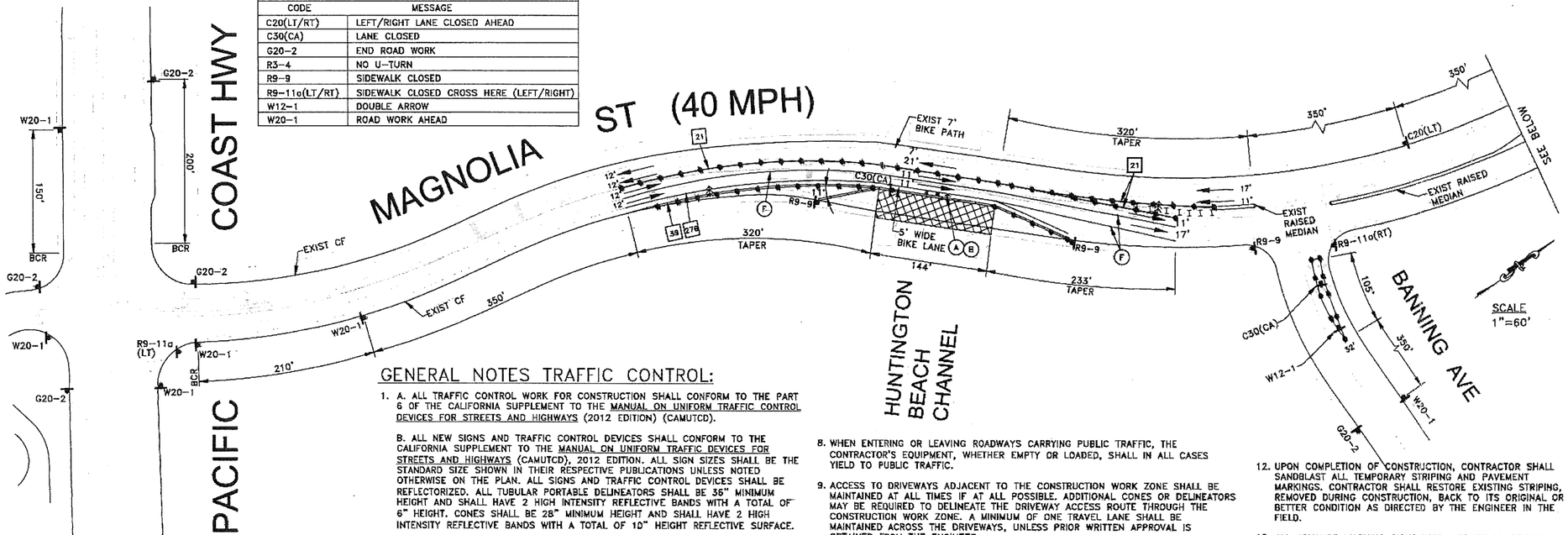
(2010211C1_T2) 2010211

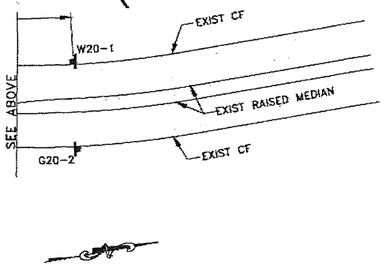
ATTACHMENT NO. 1.2

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE

C.C. No. 1356

PORTABLE SIGN INDEX	
CODE	MESSAGE
C20(LT/RT)	LEFT/RIGHT LANE CLOSED AHEAD
C30(CA)	LANE CLOSED
G20-2	END ROAD WORK
R3-4	NO U-TURN
R9-9	SIDEWALK CLOSED
R9-11a(LT/RT)	SIDEWALK CLOSED CROSS HERE (LEFT/RIGHT)
W12-1	DOUBLE ARROW
W20-1	ROAD WORK AHEAD





ESTIMATED DURATION OF THIS STAGE: XX WORKING DAYS

GENERAL NOTES TRAFFIC CONTROL:

1. A. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE PART 6 OF THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (2012 EDITION) (CAMUTCD).

   B. ALL NEW SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC DEVICES FOR STREETS AND HIGHWAYS (CAMUTCD), 2012 EDITION. ALL SIGN SIZES SHALL BE THE STANDARD SIZE SHOWN IN THEIR RESPECTIVE PUBLICATIONS UNLESS NOTED OTHERWISE ON THE PLAN. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED. ALL TUBULAR PORTABLE DELINEATORS SHALL BE 36" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 6" HEIGHT. CONES SHALL BE 28" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 10" HEIGHT REFLECTIVE SURFACE.

   C. ALL NEW STRIPING, PAVEMENT MARKERS, PAVEMENT LEGENDS, ARROWS, MARKINGS AND CURB PAINTING SHALL CONFORM TO THE 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 84, TRAFFIC STRIPES AND PAVEMENT MARKINGS, AND SECTION 85, PAVEMENT MARKERS, STANDARD PLANS A20A-D AND A24A-E. THE CURRENT CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT STANDARD PLANS, AND THESE PLANS. CONTRACTOR SHALL RESTORE ANY AND ALL STRIPING AND PAVEMENT MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION PER CITY OF HUNTINGTON BEACH REQUIREMENTS. CONTRACTOR MAY USE PREFABRICATED REMOVABLE DETOUR TAPE, PAVEMENT ARROWS, AND RAISED PAVEMENT MARKERS FOR SHORT-TERM USE AS DIRECTED BY THE ENGINEER.

2. NOTHING IN THESE NOTES OR PLANS SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.

3. THE ENGINEER SHALL BE DEFINED AS THE CITY OF HUNTINGTON BEACH TRAFFIC ENGINEER OR HIS REPRESENTATIVE OR THE STATE INSPECTOR WITHIN STATE R/W.

4. THE ENGINEER AND STATE INSPECTOR WILL HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS TO THESE PLANS AND NOTES, AS HE DEEMS NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC AND PEDESTRIANS THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE AT NO ADDITIONAL COST TO THE AGENCY.

5. CONSTRUCTION ACTIVITY IN THE ROADWAY WILL BE LIMITED TO THE HOURS BETWEEN 7:00 A.M. AND 4:00 P.M.. ALL TRENCH EXCAVATIONS WITHIN THE ROADWAY SHALL BE COVERED WITH STEEL PLATES OR TEMPORARILY BACKFILLED AND SURFACED FROM 4:00 P.M. TO 7:00 A.M., UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER (STATE INSPECTOR WITHIN STATE R/W).

6. FLASHING BEACONS AND WARNING LIGHTS SHALL BE USED AS DIRECTED BY THE ENGINEER; OR THE STATE INSPECTOR IN OR IN ADVANCE OF STATE R/W.

7. ALL EXISTING TRAFFIC CONTROL SIGNS AND STREET SIGNS SHALL BE MAINTAINED IN VISIBLE LOCATIONS DURING CONSTRUCTION, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE ENGINEER) ANY STRIPING OR SIGNING DAMAGED DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS.

8. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED, SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC.

9. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES IF AT ALL POSSIBLE. ADDITIONAL CONES OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER.

10. 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE IMMEDIATE VICINITY OF A TRAFFIC SIGNAL CONTROLLED INTERSECTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (800-422-4133). THIS PRIOR NOTICE WILL ALLOW THE LOCATION AND MARKING OF UNDERGROUND TRAFFIC SIGNAL CONDUIT AND TRAFFIC SIGNAL LOOP DETECTORS PRIOR TO CONSTRUCTION DAMAGES TO TRAFFIC SIGNAL CONDUIT, CONDUCTORS, LOOP DETECTORS, OR OTHER TRAFFIC SIGNAL EQUIPMENT SHALL BE REPAIRED WITHIN 24 HOURS AT THE CONTRACTOR'S EXPENSE, PER THE CITY OF HUNTINGTON BEACH STANDARD SPECIAL PROVISIONS FOR THE CONSTRUCTION OF TRAFFIC SIGNALS AND STREET LIGHTING, LATEST EDITION.

11. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR AT HIS EXPENSE. STREETS ALONG THE HAUL ROUTE SHALL BE SWEPT OR WASHED DAILY, DURING EACH DAY OF HAULING OPERATIONS.

12. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL SANDBLAST ALL TEMPORARY STRIPING AND PAVEMENT MARKINGS. CONTRACTOR SHALL RESTORE EXISTING STRIPING, REMOVED DURING CONSTRUCTION, BACK TO ITS ORIGINAL OR BETTER CONDITION AS DIRECTED BY THE ENGINEER IN THE FIELD.

13. ALL ADVANCE WARNING SIGNS INSTALLED SHALL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION PHASE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD TO BE REMOVED OR RELOCATED.

14. REMOVE ANY EXCESS AND/OR CONFLICTING EXISTING PAVEMENT MARKINGS AND STRIPING BY SANDBLASTING.

15. THE CONTRACTOR SHALL COORDINATE BUS STOP RELOCATIONS AND CLOSURES WITH OCTA TRANSIT.

16. THE CONTRACTOR SHALL COVER ALL CONFLICTING SIGNS.

LEGEND

	36" HIGH SURFACE MOUNTED TUBULAR MARKER
I	TYPE III BARRICADE
	PORTABLE SIGNS
	K-RAIL
	FLASHING ARROW SIGN
	CONSTRUCTION AREA
	TEMPORARY WHITE MARKINGS
	TEMPORARY STRIPING
CF	CURB FACE
EP	EDGE OF PAVEMENT
MAX	MAXIMUM
TYP	TYPICAL

PHASE 2

TEMPORARY STRIPING AND MARKINGS NOTES:

ALL TEMPORARY STRIPINGS AND PAVEMENT MARKINGS SHALL BE PER CALTRANS STANDARD PLANS (LATEST EDITION).

- [20A] INDICATES DETAIL NUMBER PER CALTRANS STD PLANS A20A TO A20D.
- (A) INSTALL BIKE LANE ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (B) INSTALL "BIKE LANE" PAVEMENT MARKING PER CALTRANS STD PLANS A24D.
- (C) INSTALL TYPE IV(L) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (D) INSTALL TYPE IV(R) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (E) INSTALL TYPE I 10' ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (F) INSTALL 4" WIDE WHITE SOLID LINE.
- (G) COVER EXISTING CONFLICTING SIGN.
- (H) INSTALL TYPE I THROUGH ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (I) INSTALL SIGN ON EXISTING TRAFFIC SIGNAL MAST ARM.
- (J) INSTALL 12" WIDE WHITE CHEVRON LINE PER CROSSWALK AND LIMIT LINE DETAIL IN CALTRANS STANDARD PLANS A24E.

Underground Service Alert — Call: 811 — TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

REV	DATE	BY	DESCRIPTION	APPVD

REFERENCES

W.G. ZIMMERMAN ENGINEERING, INC.
5772 BOLSA AVE SUITE 200
HUNTINGTON BEACH, CA 92649
TEL: (714) 799 1700
FAX: (714) 799 1701

DRAWN BY:	RC	11/12/2013
DESIGNED BY:	RB	11/12/2013
CHECKED BY:	BZ	11/12/2013

PREPARED UNDER THE SUPERVISION OF:
WILLIAM G. ZIMMERMAN, P.E. DATE
R.C.E. NO.: C48887 EXP. DATE: 9/30/2013
APPROVED BY:
TRANSPORTATION ENGINEERING

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

TRAFFIC CONTROL PLAN 2
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. X+00.00 TO STA. X+00.00

SHEET NO. 4 OF 9
TC2

ATTACHMENT NO. 1-3

PORTABLE SIGN INDEX	
CODE	MESSAGE
C20(LT/RT)	LEFT/RIGHT LANE CLOSED AHEAD
C30(CA)	LANE CLOSED
G20-2	END ROAD WORK
R3-4	NO U-TURN
R9-9	SIDEWALK CLOSED
R9-11a(LT/RT)	SIDEWALK CLOSED CROSS HERE (LEFT/RIGHT)
W12-1	DOUBLE ARROW
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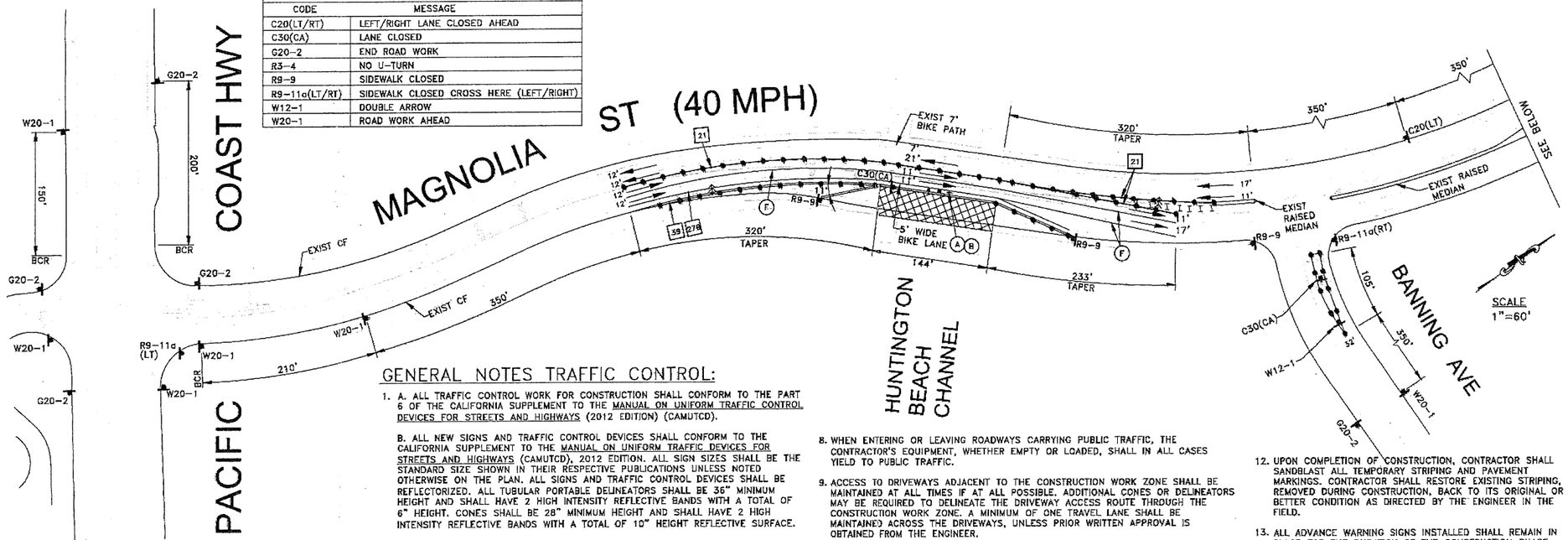

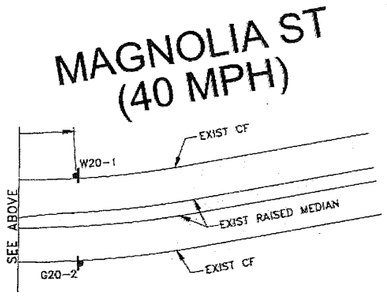

ESTIMATED DURATION OF THIS STAGE: XX WORKING DAYS

GENERAL NOTES TRAFFIC CONTROL:

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   B. ALL NEW SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC DEVICES FOR STREETS AND HIGHWAYS (CAMUTCD), 2012 EDITION. ALL SIGN SIZES SHALL BE THE STANDARD SIZE SHOWN IN THEIR RESPECTIVE PUBLICATIONS UNLESS NOTED OTHERWISE ON THE PLAN. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED. ALL TUBULAR PORTABLE DELINEATORS SHALL BE 36" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 6" HEIGHT. CONES SHALL BE 28" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 10" HEIGHT REFLECTIVE SURFACE.

   C. ALL NEW STRIPING, PAVEMENT MARKERS, PAVEMENT LEGENDS, ARROWS, MARKINGS AND CURB PAINTING SHALL CONFORM TO THE 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 84, TRAFFIC STRIPES AND PAVEMENT MARKINGS, AND SECTION 85, PAVEMENT MARKERS, STANDARD PLANS A20A-D AND A24A-E. THE CURRENT CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT STANDARD PLANS, AND THESE PLANS. CONTRACTOR SHALL RESTORE ANY AND ALL STRIPING AND PAVEMENT MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION PER CITY OF HUNTINGTON BEACH REQUIREMENTS. CONTRACTOR MAY USE PREFABRICATED REMOVABLE DETOUR TAPE, PAVEMENT ARROWS, AND RAISED PAVEMENT MARKERS FOR SHORT-TERM USE AS DIRECTED BY THE ENGINEER.
2. NOTHING IN THESE NOTES OR PLANS SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
3. THE ENGINEER SHALL BE DEFINED AS THE CITY OF HUNTINGTON BEACH TRAFFIC ENGINEER OR HIS REPRESENTATIVE OR THE STATE INSPECTOR WITHIN STATE R/W.
4. THE ENGINEER AND STATE INSPECTOR WILL HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS TO THESE PLANS AND NOTES, AS HE DEEMS NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC AND PEDESTRIANS THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE AT NO ADDITIONAL COST TO THE AGENCY.
5. CONSTRUCTION ACTIVITY IN THE ROADWAY WILL BE LIMITED TO THE HOURS BETWEEN 7:00 A.M. AND 4:00 P.M.. ALL TRENCH EXCAVATIONS WITHIN THE ROADWAY SHALL BE COVERED WITH STEEL PLATES OR TEMPORARILY BACKFILLED AND SURFACED FROM 4:00 P.M. TO 7:00 A.M., UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER (STATE INSPECTOR WITHIN STATE R/W).
6. FLASHING BEACONS AND WARNING LIGHTS SHALL BE USED AS DIRECTED BY THE ENGINEER; OR THE STATE INSPECTOR IN OR IN ADVANCE OF STATE R/W.
7. ALL EXISTING TRAFFIC CONTROL SIGNS AND STREET SIGNS SHALL BE MAINTAINED IN VISIBLE LOCATIONS DURING CONSTRUCTION, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE ENGINEER) ANY STRIPING OR SIGNING DAMAGED DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS.
8. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED, SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC.
9. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES IF AT ALL POSSIBLE. ADDITIONAL CONES OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER.
10. 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE IMMEDIATE VICINITY OF A TRAFFIC SIGNAL CONTROLLED INTERSECTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (800-422-4133). THIS PRIOR NOTICE WILL ALLOW THE LOCATION AND MARKING OF UNDERGROUND TRAFFIC SIGNAL CONDUIT AND TRAFFIC SIGNAL LOOP DETECTORS PRIOR TO CONSTRUCTION DAMAGES TO TRAFFIC SIGNAL CONDUIT, CONDUCTORS, LOOP DETECTORS, OR OTHER TRAFFIC SIGNAL EQUIPMENT SHALL BE REPAIRED WITHIN 24 HOURS AT THE CONTRACTOR'S EXPENSE, PER THE CITY OF HUNTINGTON BEACH STANDARD SPECIAL PROVISIONS FOR THE CONSTRUCTION OF TRAFFIC SIGNALS AND STREET LIGHTING, LATEST EDITION.
11. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR AT HIS EXPENSE. STREETS ALONG THE HAUL ROUTE SHALL BE SWEPT OR WASHED DAILY, DURING EACH DAY OF HAULING OPERATIONS.
12. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL SANDBLAST ALL TEMPORARY STRIPING AND PAVEMENT MARKINGS. CONTRACTOR SHALL RESTORE EXISTING STRIPING, REMOVED DURING CONSTRUCTION, BACK TO ITS ORIGINAL OR BETTER CONDITION AS DIRECTED BY THE ENGINEER IN THE FIELD.
13. ALL ADVANCE WARNING SIGNS INSTALLED SHALL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION PHASE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD TO BE REMOVED OR RELOCATED.
14. REMOVE ANY EXCESS AND/OR CONFLICTING EXISTING PAVEMENT MARKINGS AND STRIPING BY SANDBLASTING.
15. THE CONTRACTOR SHALL COORDINATE BUS STOP RELOCATIONS AND CLOSURES WITH OCTA TRANSIT.
16. THE CONTRACTOR SHALL COVER ALL CONFLICTING SIGNS.

LEGEND

	36" HIGH SURFACE MOUNTED TUBULAR MARKER
I	TYPE III BARRICADE
	PORTABLE SIGNS
	K-RAIL
	FLASHING ARROW SIGN
	CONSTRUCTION AREA
	TEMPORARY WHITE MARKINGS
	TEMPORARY STRIPING
CF	CURB FACE
EP	EDGE OF PAVEMENT
MAX	MAXIMUM
TYP	TYPICAL

PHASE 2

TEMPORARY STRIPING AND MARKINGS NOTES:

ALL TEMPORARY STRIPINGS AND PAVEMENT MARKINGS SHALL BE PER CALTRANS STANDARD PLANS (LATEST EDITION).

- [59A] INDICATES DETAIL NUMBER PER CALTRANS STD PLANS A20A TO A20D.
- (A) INSTALL BIKE LANE ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (B) INSTALL "BIKE LANE" PAVEMENT MARKING PER CALTRANS STD PLANS A24D.
- (C) INSTALL TYPE IV(L) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (D) INSTALL TYPE IV(R) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (E) INSTALL TYPE I 10' ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (F) INSTALL 4" WIDE WHITE SOLID LINE.
- (G) COVER EXISTING CONFLICTING SIGN.
- (H) INSTALL TYPE I THROUGH ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (I) INSTALL SIGN ON EXISTING TRAFFIC SIGNAL MAST ARM.
- (J) INSTALL 12" WIDE WHITE CHEVRON LINE PER CROSSWALK AND LIMIT LINE DETAIL IN CALTRANS STANDARD PLANS A24E.

C.C. No. 1356

Underground Service Alert
Call: 811
TWO WORKING DAYS BEFORE YOU DIG

REVISIONS				
REV.	DATE	BY	DESCRIPTION	APPVD

REFERENCES

W.G. ZIMMERMAN ENGINEERING, INC.
5772 BOLSA AVE SUITE 200
HUNTINGTON BEACH, CA 92649
TEL: (714) 799 1700
FAX: (714) 799 1701

DRAWN BY:	RC	11/18/2011
DESIGNED BY:	WB	11/18/2011
CHECKED BY:	WZ	11/18/2011

PREPARED UNDER THE SUPERVISION OF:
WILLIAM G. ZIMMERMAN, P.E. DATE
R.C.E. NO.: 48667 EXP. DATE: 6/30/2012
APPROVED BY:
TRANSPORTATION ENGINEERING

REGISTERED PROFESSIONAL ENGINEER WILLIAM G. ZIMMERMAN No. RCE 48667 CIVIL STATE OF CALIFORNIA

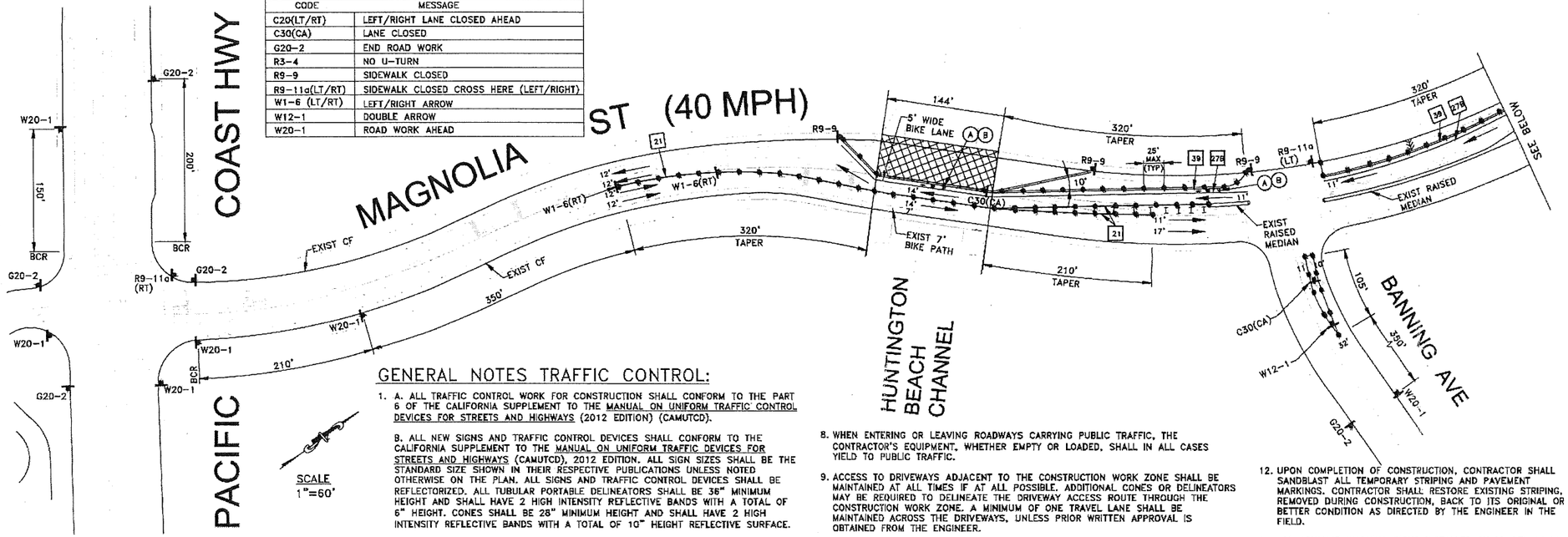
CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

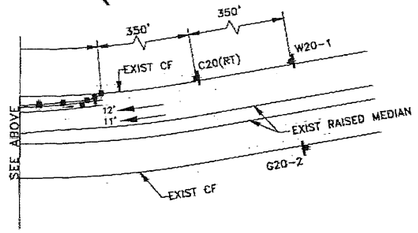
TRAFFIC CONTROL PLAN 2
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. X+00.00 TO STA. X+00.00

SHEET NO. 4 OF 9
TC2

ATTACHMENT NO. 1-4

PORTABLE SIGN INDEX	
CODE	MESSAGE
C29(LT/RT)	LEFT/RIGHT LANE CLOSED AHEAD
C30(CA)	LANE CLOSED
G20-2	END ROAD WORK
R3-4	NO U-TURN
R9-9	SIDEWALK CLOSED
R9-11a(LT/RT)	SIDEWALK CLOSED CROSS HERE (LEFT/RIGHT)
W1-6 (LT/RT)	LEFT/RIGHT ARROW
W12-1	DOUBLE ARROW
W20-1	ROAD WORK AHEAD





ESTIMATED DURATION OF THIS STAGE: XX WORKING DAYS

GENERAL NOTES TRAFFIC CONTROL:

1. A. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE PART 6 OF THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (2012 EDITION) (CAMUTCD).

   B. ALL NEW SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC DEVICES FOR STREETS AND HIGHWAYS (CAMUTCD), 2012 EDITION. ALL SIGN SIZES SHALL BE THE STANDARD SIZE SHOWN IN THEIR RESPECTIVE PUBLICATIONS UNLESS NOTED OTHERWISE ON THE PLAN. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED. ALL TUBULAR PORTABLE DELINEATORS SHALL BE 36" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 6" HEIGHT. CONES SHALL BE 28" MINIMUM HEIGHT AND SHALL HAVE 2 HIGH INTENSITY REFLECTIVE BANDS WITH A TOTAL OF 10" HEIGHT REFLECTIVE SURFACE.

   C. ALL NEW STRIPING, PAVEMENT MARKERS, PAVEMENT LEGENDS, ARROWS, MARKINGS AND CURB PAINTING SHALL CONFORM TO THE 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 84, TRAFFIC STRIPES AND PAVEMENT MARKINGS, AND SECTION 85, PAVEMENT MARKERS, STANDARD PLANS A20A-D AND A24A-E. THE CURRENT CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT STANDARD PLANS, AND THESE PLANS. CONTRACTOR SHALL RESTORE ANY AND ALL STRIPING AND PAVEMENT MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION PER CITY OF HUNTINGTON BEACH REQUIREMENTS. CONTRACTOR MAY USE PREFABRICATED REMOVABLE DETOUR TAPE, PAVEMENT ARROWS, AND RAISED PAVEMENT MARKERS FOR SHORT-TERM USE AS DIRECTED BY THE ENGINEER.
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3. THE ENGINEER SHALL BE DEFINED AS THE CITY OF HUNTINGTON BEACH TRAFFIC ENGINEER OR HIS REPRESENTATIVE OR THE STATE INSPECTOR WITHIN STATE R/W.
4. THE ENGINEER AND STATE INSPECTOR WILL HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS TO THESE PLANS AND NOTES, AS HE DEEMS NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC AND PEDESTRIANS THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE AT NO ADDITIONAL COST TO THE AGENCY.
5. CONSTRUCTION ACTIVITY IN THE ROADWAY WILL BE LIMITED TO THE HOURS BETWEEN 7:00 A.M. AND 4:00 P.M.. ALL TRENCH EXCAVATIONS WITHIN THE ROADWAY SHALL BE COVERED WITH STEEL PLATES OR TEMPORARILY BACKFILLED AND SURFACED FROM 4:00 P.M. TO 7:00 A.M., UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER (STATE INSPECTOR WITHIN STATE R/W).
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8. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED, SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC.
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10. 48 HOURS PRIOR TO COMMENCING ANY WORK WITHIN THE IMMEDIATE VICINITY OF A TRAFFIC SIGNAL CONTROLLED INTERSECTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (800-422-4133). THIS PRIOR NOTICE WILL ALLOW THE LOCATION AND MARKING OF UNDERGROUND TRAFFIC SIGNAL CONDUIT AND TRAFFIC SIGNAL LOOP DETECTORS PRIOR TO CONSTRUCTION DAMAGES TO TRAFFIC SIGNAL CONDUIT, CONDUCTORS, LOOP DETECTORS, OR OTHER TRAFFIC SIGNAL EQUIPMENT SHALL BE REPAIRED WITHIN 24 HOURS AT THE CONTRACTOR'S EXPENSE, PER THE CITY OF HUNTINGTON BEACH STANDARD SPECIAL PROVISIONS FOR THE CONSTRUCTION OF TRAFFIC SIGNALS AND STREET LIGHTING, LATEST EDITION.
11. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR AT HIS EXPENSE. STREETS ALONG THE HAUL ROUTE SHALL BE SWEPT OR WASHED DAILY, DURING EACH DAY OF HAULING OPERATIONS.
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13. ALL ADVANCE WARNING SIGNS INSTALLED SHALL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION PHASE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD TO BE REMOVED OR RELOCATED.
14. REMOVE ANY EXCESS AND/OR CONFLICTING EXISTING PAVEMENT MARKINGS AND STRIPING BY SANDBLASTING.
15. THE CONTRACTOR SHALL COORDINATE BUS STOP RELOCATIONS AND CLOSURES WITH OCTA TRANSIT.
16. THE CONTRACTOR SHALL COVER ALL CONFLICTING SIGNS.

LEGEND

- 36" HIGH SURFACE MOUNTED TUBULAR MARKER
- TYPE III BARRICADE
- PORTABLE SIGNS
- K-RAIL
- FLASHING ARROW SIGN
- CONSTRUCTION AREA
- TEMPORARY WHITE MARKINGS
- TEMPORARY STRIPING
- CF CURB FACE
- EP EDGE OF PAVEMENT
- MAX MAXIMUM
- TYP TYPICAL

TEMPORARY STRIPING AND MARKINGS NOTES:

ALL TEMPORARY STRIPINGS AND PAVEMENT MARKINGS SHALL BE PER CALTRANS STANDARD PLANS (LATEST EDITION).

- 20A INDICATES DETAIL NUMBER PER CALTRANS STD PLANS A20A TO A20D.
- (A) INSTALL BIKE LANE ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (B) INSTALL "BIKE LANE" PAVEMENT MARKING PER CALTRANS STD PLANS A24D.
- (C) INSTALL TYPE IV(L) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (D) INSTALL TYPE IV(R) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (E) INSTALL TYPE I 10' ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (F) INSTALL 4" WIDE WHITE SOLID LINE.
- (G) COVER EXISTING CONFLICTING SIGN.
- (H) INSTALL TYPE I THROUGH ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
- (I) INSTALL SIGN ON EXISTING TRAFFIC SIGNAL MAST ARM.
- (J) INSTALL 12" WIDE WHITE CHEVRON LINE PER CROSSWALK AND LIMIT LINE DETAIL IN CALTRANS STANDARD PLANS A24E.

PHASE 3

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE

C.C. No. 1356

Underground Service Alert
DIG ALERT
Call: 811
TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

REV	DATE	BY	DESCRIPTION	APP'VD

REFERENCES

W.G. ZIMMERMAN ENGINEERING, INC.
5772 BOLSA AVE SUITE 200
HUNTINGTON BEACH, CA 92649
TEL: (714) 799 1700
FAX: (714) 799 1701

DRAWN BY:	RC	11/18/2011
DESIGNED BY:	RB	11/18/2011
CHECKED BY:	BZ	11/18/2011

PREPARED UNDER THE SUPERVISION OF:
WILLIAM G. ZIMMERMAN, P.E. DATE
R.C.E. NO.: C48887 EXP. DATE: 6/30/2012
APPROVED BY:
TRANSPORTATION ENGINEERING
REGISTERED PROFESSIONAL ENGINEER WILLIAM G. ZIMMERMAN RCE 48887 CIVIL STATE OF CALIFORNIA

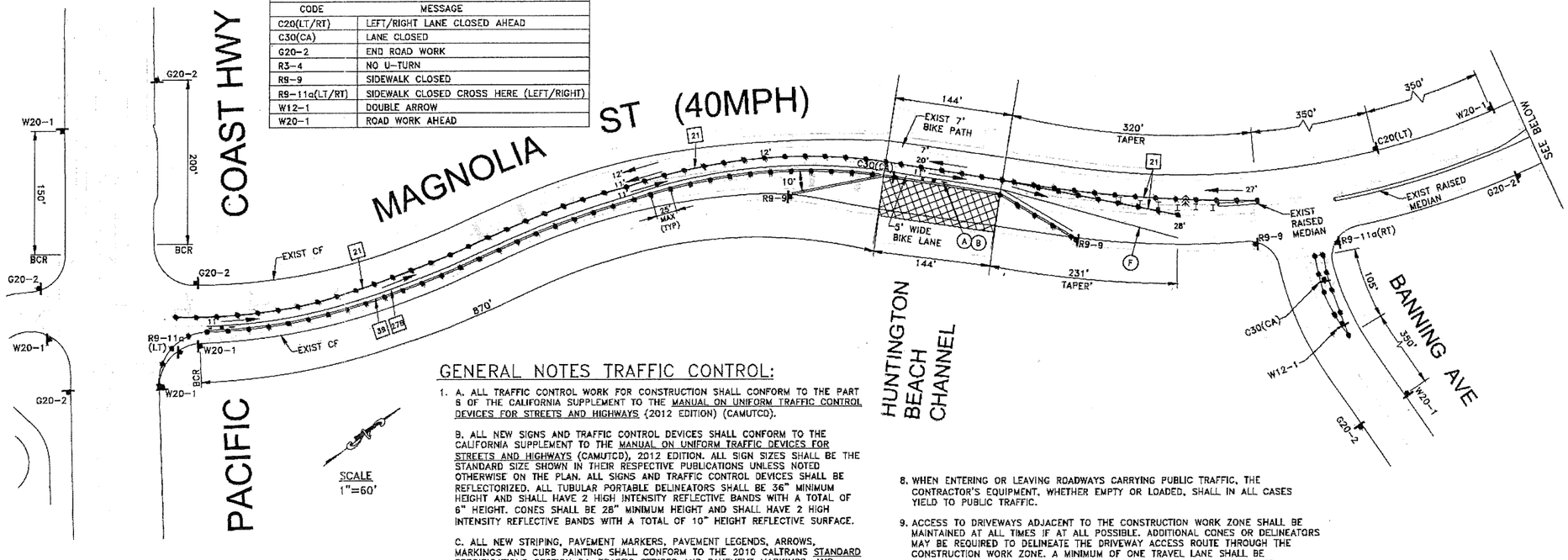
CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

TRAFFIC CONTROL PLAN 3
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. X+00.00 TO STA. X+00.00

SHEET NO. 5 OF 9
TC3

ATTACHMENT NO. 1-5

PORTABLE SIGN INDEX	
CODE	MESSAGE
C20(LT/RT)	LEFT/RIGHT LANE CLOSED AHEAD
C30(CA)	LANE CLOSED
G20-2	END ROAD WORK
R3-4	NO U-TURN
R9-9	SIDEWALK CLOSED
R9-11a(LT/RT)	SIDEWALK CLOSED CROSS HERE (LEFT/RIGHT)
W12-1	DOUBLE ARROW
W20-1	ROAD WORK AHEAD



SCALE
1"=60'

GENERAL NOTES TRAFFIC CONTROL:

1. A. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO THE PART 6 OF THE CALIFORNIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (2012 EDITION) (CAMUTCD).

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   C. ALL NEW STRIPING, PAVEMENT MARKERS, PAVEMENT LEGENDS, ARROWS, MARKINGS AND CURB PAINTING SHALL CONFORM TO THE 2010 CALTRANS STANDARD SPECIFICATIONS SECTION 84, TRAFFIC STRIPES AND PAVEMENT MARKINGS, AND SECTION 85, PAVEMENT MARKERS, STANDARD PLANS A20A-D AND A24A-E. THE CURRENT CITY OF HUNTINGTON BEACH PUBLIC WORKS DEPARTMENT STANDARD PLANS, AND THESE PLANS. CONTRACTOR SHALL RESTORE ANY AND ALL STRIPING AND PAVEMENT MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION PER CITY OF HUNTINGTON BEACH REQUIREMENTS. CONTRACTOR MAY USE PREFABRICATED REMOVABLE DETOUR TAPE, PAVEMENT ARROWS, AND RAISED PAVEMENT MARKERS FOR SHORT-TERM USE AS DIRECTED BY THE ENGINEER.
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16. THE CONTRACTOR SHALL COVER ALL CONFLICTING SIGNS.

TEMPORARY STRIPING AND MARKINGS NOTES:

ALL TEMPORARY STRIPINGS AND PAVEMENT MARKINGS SHALL BE PER CALTRANS STANDARD PLANS (LATEST EDITION).

39A INDICATES DETAIL NUMBER PER CALTRANS STD PLANS A20A TO A20D.

(A) INSTALL BIKE LANE ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
(B) INSTALL "BIKE LANE" PAVEMENT MARKING PER CALTRANS STD PLANS A24D.
(C) INSTALL TYPE IV(L) ARROW PAVEMENT MARKING PER CALTRANS STD PLANS A24A.
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(I) INSTALL SIGN ON EXISTING TRAFFIC SIGNAL MAST ARM.
(J) INSTALL 12" WIDE WHITE CHEVRON LINE PER CROSSWALK AND LIMIT LINE DETAIL IN CALTRANS STANDARD PLANS A24E.

ESTIMATED DURATION OF THIS STAGE: XX WORKING DAYS

LEGEND

	36" HIGH SURFACE MOUNTED TUBULAR MARKER
I	TYPE III BARRICADE
	PORTABLE SIGNS
	K-RAIL
	FLASHING ARROW SIGN
	CONSTRUCTION AREA
	TEMPORARY WHITE MARKINGS
	TEMPORARY STRIPING
CF	CURB FACE
EP	EDGE OF PAVEMENT
MAX	MAXIMUM
TYP	TYPICAL

PHASE 4

C.C. No. 1356

Underground Service Alert — Call: 811 — TWO WORKING DAYS BEFORE YOU DIG

REVISIONS				
REV.	DATE	BY	DESCRIPTION	APP'D

REFERENCES

W.G. ZIMMERMAN ENGINEERING, INC.
5772 BOLSA AVE SUITE 200
HUNTINGTON BEACH, CA 92649
TEL: (714) 799 1700
FAX: (714) 799 1701

DRAWN BY:	BC	11/18/2011
DESIGNED BY:	RB	11/18/2011
CHECKED BY:	BZ	11/18/2011

PREPARED UNDER THE SUPERVISION OF:
WILLIAM G ZIMMERMAN, P.E. DATE
R.C.E. NO.: C48887 EXP. DATE: 6/30/2012
APPROVED BY:
TRANSPORTATION ENGINEERING

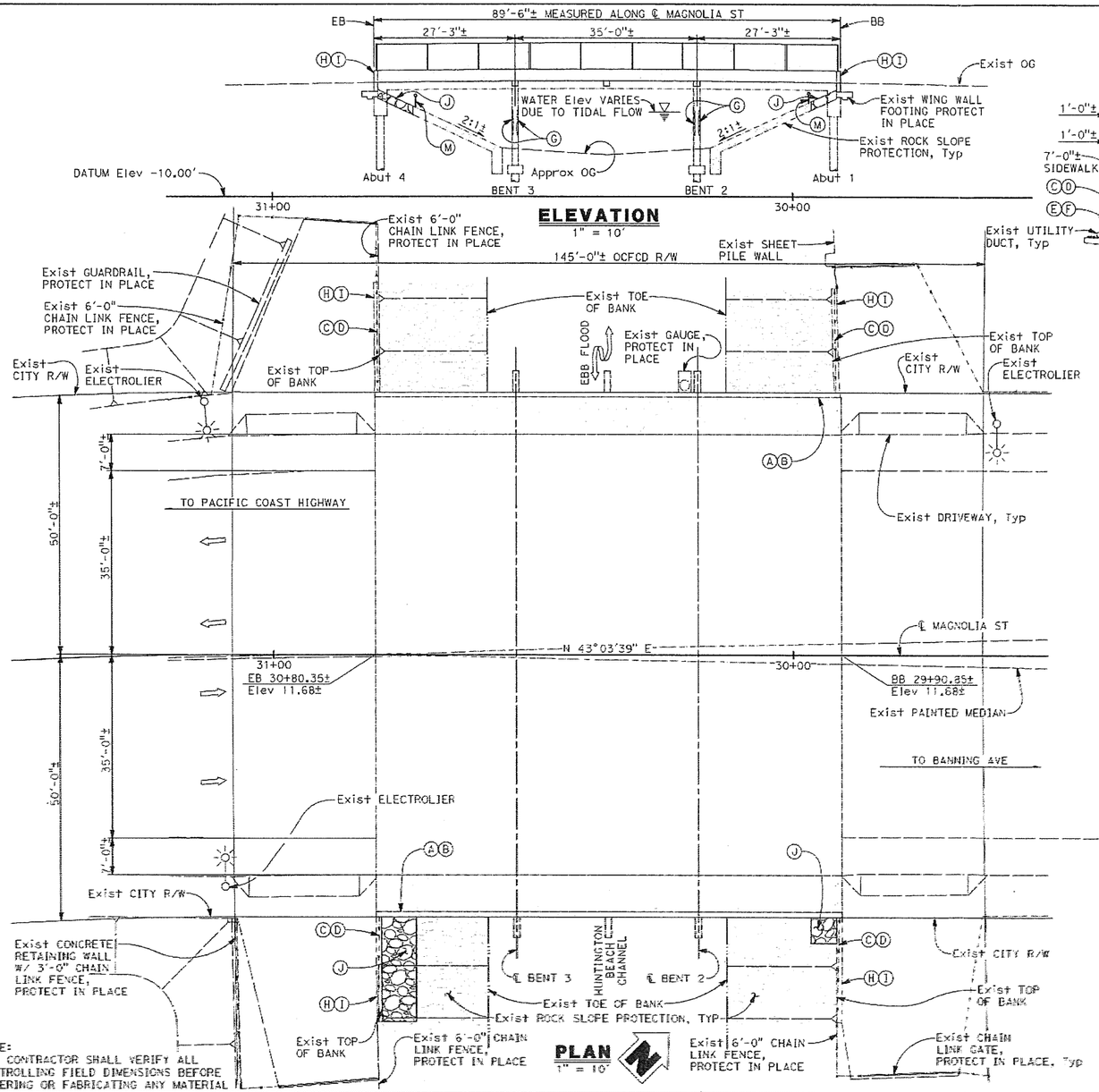
REGISTERED PROFESSIONAL ENGINEER — WILLIAM G. ZIMMERMAN — RCE 48887 — Exp 06-30-2012 — CIVIL — STATE OF CALIFORNIA

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

TRAFFIC CONTROL PLAN 4
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. X+00.00 TO STA. X+00.00

SHEET NO. 6 OF 9
TC4

ATTACHMENT NO. 1-6



NOTES:

- (A) Paint 'BRIDGE No. 55C-0388'
- (B) Paint 'HUNTINGTON BEACH CHANNEL BRIDGE'
- (C) Remove existing Chain Link Fence
- (D) Chain Link Fence
- (E) Remove existing sidewalk and Concrete Barrier
- (F) Concrete Barrier Type 26 (Mod)
- (G) Remove and patch unsound concrete
- (H) Remove Concrete Wing Wall
- (I) Concrete Wing Wall
- (J) Replace Rock Slope Protection (where missing)
- (K) Remove existing AC Overlay
- (L) 2" Polyester Concrete Overlay
- (M) Install Silt Curtains

LEGEND:

- Indicates portion of existing bridge to be removed
- Indicates existing structure
- Indicates new construction
- Indicates direction of travel
- Indicates existing Rock Slope Protection
- Indicates new Rock Slope Protection
- Indicates unsound concrete to be removed and patched

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE

C.C. No. 1356

PLAN CHECK SET/NOT FOR CONSTRUCTION (5/16/12)

Underground Service Alert
Call: 811
TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

REV	DATE	BY	DESCRIPTION	APPVD

REFERENCES

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
800 So. Main St., Suite 800, Orange, California 92868, (714) 532-4880

DRAWN BY:	DM	05/15/12
DESIGNED BY:	RBS	05/15/12
CHECKED BY:		

PREPARED UNDER THE SUPERVISION OF:
Michael A. Thomas PRINCIPAL S.E. DATE
R.S.E. NO.: 54876 EXP. DATE: 03/31/13
APPROVED BY:
M. Todd Brausnna PRINCIPAL C.E. DATE
R.C.E. NO.: C57144 EXP. DATE: 12/31/13

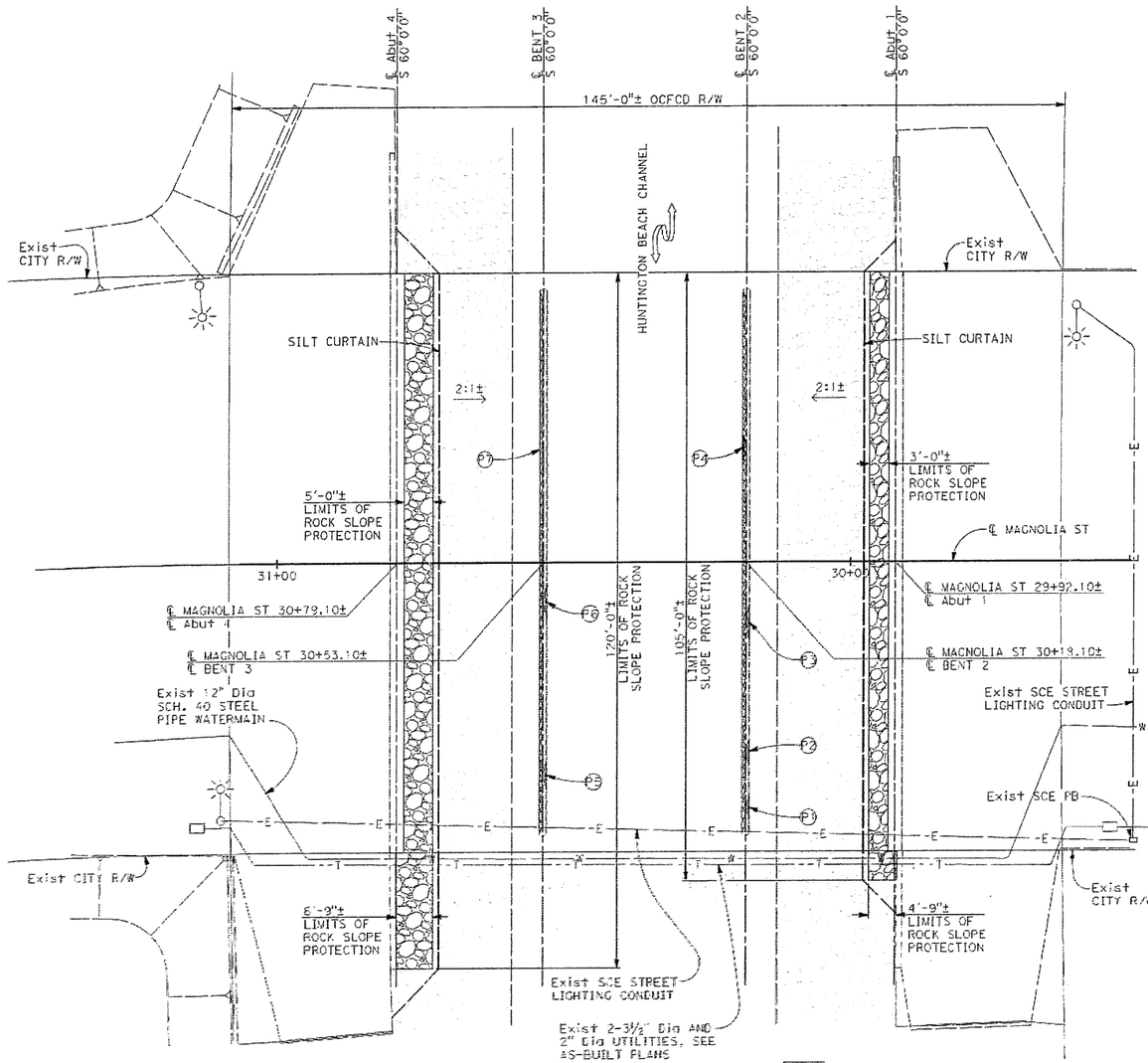
CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

GENERAL PLAN
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. XX+00.00 TO STA. XX+00.00

SHEET NO. 7 OF 9
S1

[2010211:C1_S1] 2010211

ATTACHMENT NO. 1-7



FOUNDATION PLAN
1" = 10'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL

NOTES:
1. (P1) Indicates spall or crack repair, see 'Repair Schedule'
2. ——— Indicates exist structure
3. ——— Indicates new structure
4. Utilities shown are for illustrative purposes only, verify with Road Plans and As-Built Plans.
5. Indicates existing Rock Slope Protection
6. Indicates new Rock Slope Protection
7. Indicates portion of existing bridge to be removed
8. Indicates unsound concrete to be removed and patched

REPAIR SCHEDULE

BRIDGE PIER WALL	
P1	2'-0" x 2'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P2	4'-0" x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P3	6'-0" x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P4	FULL LENGTH x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P5	4'-0" x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P6	6'-0" x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE
P7	FULL LENGTH x 4'-0" x 0'-4" DEEP CRACKED/SPALLED CONCRETE

STANDARD PLANS DATED 2010

A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	SYMBOLS (SHEET 1 OF 2)
A10D	SYMBOLS (SHEET 2 OF 2)
B11-52	CHAIN LINK RAILING TYPE 7
B11-54	CONCRETE BARRIER TYPE 26

B6-1 / D-1 — Indicates Standard Plan Sheet No. / Indicates Detail No.

GENERAL NOTES
LOAD & RESISTANCE FACTOR DESIGN

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition, and Caltrans Amendments; except that Concrete Barrier Type 26 (Mod) designed using Bridge Design Specifications ('96 AASHTO with Revisions by Caltrans)

PLAN CHECK SET/NOT FOR CONSTRUCTION (5/16/12)

Underground Service Alert — Call 811 — TWO WORKING DAYS BEFORE YOU DIG

REVISIONS				
REV.	DATE	BY	DESCRIPTION	APP'D

REFERENCES

BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS
300 So. Main St., Suite 800, Orange, California 92868

DRAWN BY	EM	05/15/12
DESIGNED BY	RBG	05/15/12
CHECKED BY		

PREPARED UNDER THE SUPERVISION OF:
Michael A. Thomas PRINCIPAL S.E. DATE
R.S.E. NO. 54878 EXP. DATE: 08/30/13
APPROVED BY:
M. Todd Broussard PRINCIPAL C.E. DATE
R.C.E. NO.: 057144 EXP. DATE: 12/31/13

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

FOUNDATION PLAN
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. XX+00.00 TO STA. XX+00.00

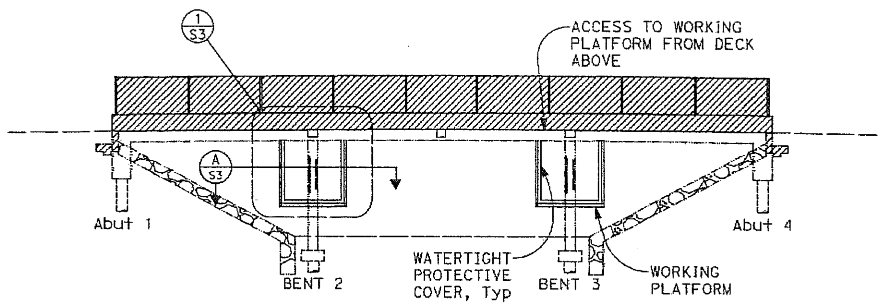
SHEET NO. 8 OF 9 — S2

(20102811C1_S2) 20102811

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE

C.C. No. 1356

ATTACHMENT NO. 1-8



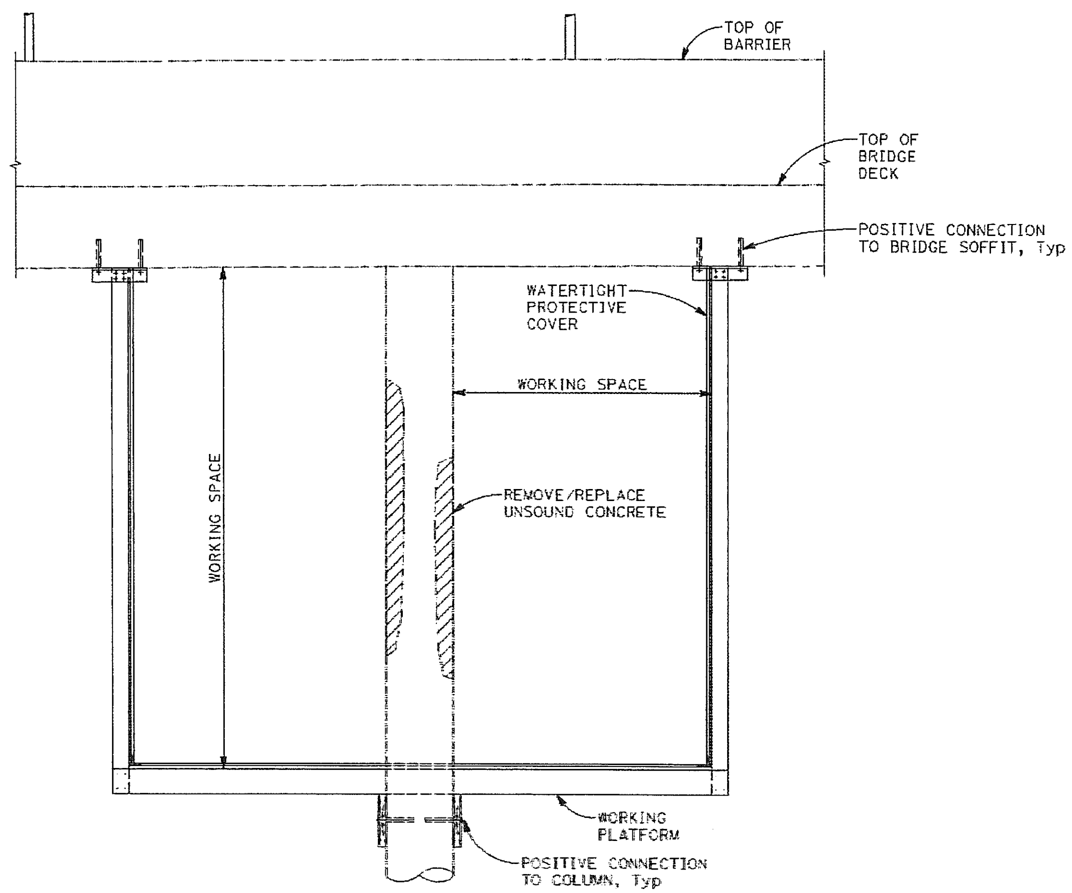
ELEVATION
1" = 10'

SUBSTRUCTURE REPAIR SEQUENCE:

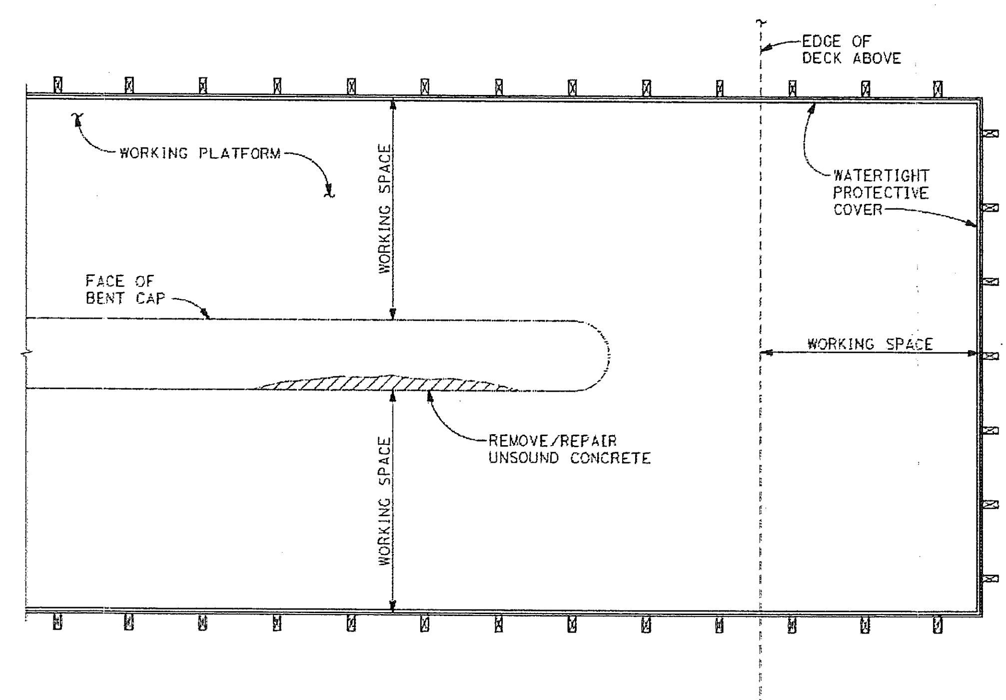
1. Construct Working Platform and Watertight Protective cover during low tide periods.
2. All joints, corners and connections shall be watertight and approved by the engineer before beginning any removal or repair work.
3. Remove/replace all unsound concrete at pier walls. Blast clean all corroded reinforcement.
4. Clean and remove all loose debris from construction materials from working platform after completion of repairs.
5. Remove Working Platform and Watertight Protective Cover during low tide periods.

NOTES:

1. (hatched) Indicates portion of existing bridge to be removed



DETAIL 1/S3
3/4" = 1'-0"



SECTION A/S3
3/4" = 1'-0"

PLAN CHECK SET/NOT FOR CONSTRUCTION (5/15/12)

MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE C.C. No. 1356

Underground Service Alert	REVISIONS					REFERENCES
Call: 811	REV.	DATE	BY	DESCRIPTION	APPR'VD	
TWO WORKING DAYS BEFORE YOU DIG						

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
800 So. Main St, Suite 600
Orange, California 92868
714-550-4880
BCA

DRAWN BY:	DM	05/15/12
DESIGNED BY:	RBS	05/15/12
CHECKED BY:		

PREPARED UNDER THE SUPERVISION OF:
Michael A. Thomas PRINCIPAL S.E. DATE
R.S.E. NO.: S4676 EXP. DATE: 09/30/12
APPROVED BY:
M. Todd Broussard PRINCIPAL C.E. DATE
R.C.E. NO.: C57144 EXP. DATE: 12/31/13

REGISTERED PROFESSIONAL ENGINEER MICHAEL A. THOMAS No. S4676 Exp. 9/30/12 STRUCTURAL STATE OF CALIFORNIA

CITY OF HUNTINGTON BEACH
DEPARTMENT OF PUBLIC WORKS

SUBSTRUCTURE REPAIR SEQUENCE
MAGNOLIA ST BRIDGE PREVENTIVE MAINTENANCE
(OVER HUNTINGTON BEACH CHANNEL)
STA. XX+00.00 TO STA. XX+00.00

SHEET NO. 9 OF 9
S3

(2010211C1_S3) 2010211

ATTACHMENT NO. 1.9

Attachment No. 2

Summary of Mitigation Measures

Description of Impact	Mitigation Measure
Impacts related to special status species and biological resources.	**BR-1: Implement Workers' Environmental Awareness Program** The presentation of a Workers' Environmental Awareness Program (WEAP) will decrease the likelihood of incidental impacts to special-status species on the project site. Prior to construction activities, a qualified biological monitor will present a WEAP to all construction personnel. The WEAP will also be given to any new personnel who work onsite during the duration of the project. The purpose of the WEAP is to inform the construction personnel of the special-status species that will likely occur in the project area, species identification, and the conservation measures implemented to protect the biological resources onsite. The WEAP will incorporate any special-status species that are discovered during project activities.

Description of Impact	Mitigation Measure
Impacts related to special-status wildlife and nesting birds subject to the Migratory Bird Treaty Act (MBTA).	**BR-2: Conduct Biological Monitoring** Since this project is occurring adjacent to and within the HBWC, it is necessary for the biological resources of this project to be monitored during construction for the duration of project. A qualified and/or permitted biologist will be essential for conducting this monitoring. A qualified biological monitor (qualified biologist) will be present during all vegetation clearing activities, if any, to monitor habitat conditions and construction impacts at the project site in order to ensure that impacts remain less than significant. Following the initial vegetation clearing and grading activities, the biological monitor will be present up to 8 hours every two weeks, outside of nesting season, or as deemed appropriate by regulatory agencies, to ensure that project-related activities do not incur impacts greater than anticipated. During nesting season, the biological monitor should be present up to 8 hours weekly, or as deemed appropriate by regulatory agencies, to survey for nesting birds, with focus on special-status and MBTA-protected species. The monitor will establish a buffer area around any occupied special-status or MBTA-protected species nests that are discovered, as described in **PDF-4** and **5**. A permitted biologist will be used if required by the resource agencies; otherwise an experienced, qualified biologist will conduct the surveys. A **qualified biological monitor** is an individual who has professional experience working with the dominant flora and fauna of southern California present in the project area. He or she is knowledgeable of the life history and survey techniques (including formal protocols) for salt marsh and coastal sage scrub species, specifically federal/State listed species and special status species. He or she has professional experience in construction monitoring and finding and monitoring bird nests, and is familiar with biological regulations, particularly those pertaining to migratory birds and their nests. A **permitted biologist** is an individual who can serve as a qualified biologist and also holds a scientific permit, issued by the United States Fish and Wildlife Service under Section 10(a)(1)(A) of the federal Endangered Species Act. He or she has professional knowledge and experience with special-status species, specifically the federal/State listed species and special status species. Such a biologist has several years of experience in field surveys and species monitoring. A permitted biologist also possesses all of the qualifications of a qualified biologist described above.

ATTACHMENT NO. 2-2

Description of Impact	Mitigation Measure
Impacts related to archaeological resources.	**CU-1** Archaeological Monitoring If unexpected archaeological features are discovered during ground-disturbing construction work, a qualified archaeologist will be retained to investigate and report such findings to the City if deemed necessary. If the archaeological resources are found to be significant, the archaeologist will determine appropriate actions, in cooperation with the City, for exploration and/or salvage. These actions, as well as final disposition of the resources, will be subject to the approval of the City.
Impacts related to discovery of human remains.	**CU-2** Notify County Coroner of Human Remains In accordance with Public Resources Code §5097.94, if human remains are found, the Orange County Coroner must be notified within 24 hours of the discovery. If the Coroner determines that the remains are not recent, the Coroner will notify the Native American Heritage Commission in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the City of Huntington Beach the disposition of the human remains.
Impacts related to construction noise.	**N-1** Keep Equipment Tuned and Use Mufflers The construction contractor shall ensure that all construction equipment, fixed or mobile is properly operating (tuned-up) and that mufflers are working adequately.
Impacts related to construction noise.	**N-2** Direct Noise Away From Sensitive Receivers The construction contractor shall ensure that all construction equipment is located so that emitted noise is directed away from sensitive noise receivers.
Impacts related to construction noise.	**N-3** Locate Stockpiling and Vehicle Staging Distant From Sensitive Receivers The construction contractor shall ensure that stockpiling and vehicle-staging areas are located as far as practical from noise-sensitive receivers during construction activities.
Impacts related to construction noise.	**N-4** Notify Residences Within 150 Feet of Construction Two weeks prior to the construction, the construction contractor shall provide notification in writing to adjacent residences if they will be located within 150 feet of the active construction activity.

ATTACHMENT NO. 2.3

Description of Impact	Mitigation Measure
Impacts related to construction noise.	**N-5** Use Temporary Noise Barriers if Necessary The construction contractor shall, as necessary, provide temporary noise barriers, including sound blankets, between the areas of active construction and sensitive receivers.

ATTACHMENT NO. 2-4